

# Plant Inventory No. 201, Part 1

Plant Materials Introduced January 1 to June 30, 1992 (Nos. 559359 to 561075)





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Plant Inventory No. 201 is a listing of plant materials introduced into the U.S. National Plant Germplasm System during calendar year 1992. The Inventory is divided into two parts that encompass PI numbers 559359 - 564685. This is not a listing of plant material for distribution.

Questions about data organization and proper plant identifications should be directed to the editor:

R.A. Norris National Germplasm Resources Laboratory 10300 Baltimore Ave. Bldg. 003, Rm. 400 Beltsville, MD 20705

Other contributors to Plant Inventory 201 included:

V.M. Binstock

J.M. Ceresa

K.F. Endress

H.L. Harmon

Q.P. Sinnott

A.K. Stoner

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ARS has no additional copies for free distribution.

Donated by: Singh, K.B., ICARDA, Legume Program, P.O. Box 5466, Aleppo, Syria; and ICRISAT. remarks: Five Chickpea Germplasm Lines Resistant to Ascochyta Blight. Received December 20, 1991.

- PI 559359 origin: Syria. developed: M.V. Reddy, K.B. Singh. origin institute: ICARDA, Legume Program, P.O. Box 5466, Aleppo Syria. source history: Introduction from USSR and purified. cultivar: ILC 200. other id: GP-103. source: Crop Sci. 32(4):1079 1992. group: CSR-OTHER LEGUMES. remarks: Kabuli type. Seeds small, pea-shaped. Color orange. Maturity late. Plant height medium. Resistant to Ascochyta blight. Breeding Material. Seed.
- PI 559360 origin: Syria. developed: M.V. Reddy, K.B. Singh. origin institute: ICARDA, Legume Program, P.O. Box 5466, Aleppo Syria. source history: Collection from Syria, but its origin unknown. cultivar: ILC 6482. other id: GP-104. source: Crop Sci. 32(4):1079 1992. group: CSR-OTHER LEGUMES. remarks: Kabuli type. Seeds medium, ramhead-shaped. Color beige. Maturity late. Plant height medium. Resistant to Ascochyta blight. Breeding Material. Seed.
- PI 559361 origin: Syria. developed: M.V. Reddy, K.B. Singh. origin institute: ICARDA, Legume Program, P.O. Box 5466, Aleppo Syria. source history: Introduction from Iran and purified. cultivar: ICC 4475. other id: GP-105. source: Crop Sci. 32(4):1079 1992. group: CSR-OTHER LEGUMES. remarks: Desi type. Seeds small. Shape angular. Color black. Maturity late. Plant height medium. Resistant to Ascochyta blight. Breeding Material. Seed.
- PI 559362 origin: Syria. developed: M.V. Reddy, K.B. Singh. origin institute: ICARDA, Legume Program, P.O. Box 5466, Aleppo Syria. source history: Introduction from India and purified. cultivar: ICC 6328. other id: GP-106. source: Crop Sci. 32(4):1079 1992. group: CSR-OTHER LEGUMES. remarks: Desi type. Seeds small. Shape angular. Color black. Maturity late. Plant height medium. Resistant to Ascochyta blight. Breeding Material. Seed.
- PI 559363 origin: Syria. developed: M.V. Reddy, K.B. Singh. origin institute: ICARDA, Legume Program, P.O. Box 5466, Aleppo Syria. source history: Introduction from ICRISAT, India, but its origin unknown. cultivar: ICC 12004. other id: GP-107. source: Crop Sci. 32(4):1079 1992. group: CSR-OTHER LEGUMES. remarks: Desi type. Seeds small. Shape angular. Color brown. Maturity late. Plant height medium. Resistant to Ascochyta blight. Breeding Material. Seed.

Donated by: Elden, T.C., Agricultural Research Service -- USDA, Bldg. 467, BARC-East, Beltsville, Maryland 20705, United States; and Illinois Agr. Exp. Sta.; and Purdue University Agr. Exp. Sta.. remarks: MBB 80-133, L86K-73, and L86K-96 Soybean Germplasm. Received December 20, 1991.

PI 559364 origin: United States. developed: T.C. Elden, R.L. Bernard, M. Kogan, C.G. Helm, L.W. Bledsoe. origin institute: Agricultural Research Service -- USDA, Bldg. 467, BARC-East, Beltsville, Maryland 20705 United States. cultivar: MBB 80-133. pedigree: Union X L76-0038 (Williams X PI 171451). other id: GP-138. source: Crop Sci. 32(4):1082 1992. group: CSR-SOYBEAN. restricted: CSR. remarks: Group III maturity line with resistance to Mexican bean beetle (Epilachna varivestis Mulsant), and other foliar feeding insect pests. Stems indeterminate, pubescense normal erect. Flowers white. Pods tan. Seed yellow, hila black, pubescence brown. Seed quality good with 40% protein and 19.4% oil. Seed size 12.4g per 100 seed. Average plant height 127cm. Spring Annual. Breeding Material. Seed.

origin: United States. developed: T.C. Elden, R.L.
Bernard, M. Kogan, C.G. Helm, L.W. Bledsoe. origin
institute: Agricultural Research Service -- USDA, Bldg.
467, BARC-East, Beltsville, Maryland 20705 United
States. cultivar: L86K-73. pedigree: L73-4673 X
L76-0132 (Beeson X PI 171451). other id: GP-139.
source: Crop Sci. 32(4):1082 1992. group: CSR-SOYBEAN.
restricted: CSR. remarks: Group III maturity line with
resistance to Mexican bean beetle (Epilachna varivestis
Mulsant) and other foliar feeding insect pests. Stems
indeterminate, pubescense normal erect. Flowers white.
Pods tan. Seed yellow, hila yellow, pubescence gray. Seed
quality good with 40.0% protein and 19.4% oil. Seed size
12.4g per 100 seed. Average plant height 127cm. Spring
Annual. Breeding Material. Seed.

PI 559366 origin: United States. developed: T.C. Elden, R.L. Bernard, M. Kogan, C.G. Helm, L.W. Bledsoe. origin institute: Agricultural Research Service -- USDA, Bldg. 467, BARC-East, Beltsville, Maryland 20705 United States. cultivar: L86K-96. pedigree: Williams 82 X L76-0279 (Williams X PI 229358). other id: GP-140. source: Crop Sci. 32(4):1082 1992. group: CSR-SOYBEAN. restricted: CSR. remarks: Group III maturity line with resistance to Mexican bean beetle (Epilachna varivestis Mulsant), and other foliar feeding insect pests. Stems indeterminate, pubescense normal erect. Flowers white. Pods tan. Seed yellow, hila black, pubescence brown. Seed quality good with 40.0% protein and 19.4% oil. Seed size 12.4g per 100 seed. Average plant height 127cm. Spring Annual. Breeding Material. Seed.

PI 559367. Linum usitatissimum L. LINACEAE Flax

Donated by: Putnam, D.H., Minnesota Agr. Exp. Sta., University of Minnesota, St. Paul, Minnesota 55108, United States; and Agricultural Research Service -- USDA. remarks: Verne Flax. Received December 20, 1991.

origin: United States. developed: V.E. Comstock, D. Putnam. origin institute: Minnesota Agr. Exp. Sta., Dept. of Agronomy and Plant Genetics, University of Minnesota, St. Paul, Minnesota 55108 United States. cultivar: VERNE. pedigree: Culbert / Hioil 5017. other id: CV-42. source: Crop Sci. 32(4):1065 1992. group: CSR-FLAX. other id: CI 2938. restricted: CSR. Contains the L6 gene which conditions resistance to all known North American races of rust (Melampsora lini). Resistance high to wilt (Fusarium oxysporum). Resistance moderate to pasmo (Mycosphaerella linicola). Flowers early (56 d from planting to full bloom). Matures early. Height medium (56-60cm). Resistant to lodging. Oil content high. Iodine value medium. Flowers blue, intermediate-small. Seeds brown. Seed size average (5 q/1,000 seeds). Adapted to the north central region of the United States. Cultivar. Seed.

PI 559368. Avena sativa L. POACEAE Common oat

Donated by: Barnett, R.D., University of Florida, Agric. Res. & Ed. Ctr., Rt. 3, Box 638, Quincy, Florida 32351, United States. Received 1991.

origin: United States. origin institute: Florida Agric. Exp. Station, Quincy, Florida United States. cultivar: FLORIDA 502. pedigree: Developed from 3-way cross. remarks: Maturity early. Height medium. Straw strong. Resistant to sporium leaf spot. Kernels larger, plumper than Fl. 501. Kernels dark tan, not bright yellow as Fl. 501. Leaves upright, short, broad, blue-green in color. Being increased by Florida Found. Seed Prod., Box 309, Greenwood, FL 32443. Cultivar. Seed.

PI 559369. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Caviness, C.E., Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas 72701, United States; and Agricultural Research Service -- USDA. Received 1991.

origin: United States. developed: C.E. Caviness, H.J. Walters. origin institute: Arkansas Agr. Exp. Sta., Arkansas United States. cultivar: Lee 68. pedigree: Derived from composite 30 resistant F4 lines from the cross of Lee (6) x Arksoy. other id: CV-72. source: Crop Sci. 8(6):777 1968. group: CSR-SOYBEAN. remarks: Maturity Group VI. Flowers purple. Pubescence tawny, Pod wall tan. Seedcoats shiny, yellow. Hila black. Lodging severe (no more severe when grown in disease-free soils) and associated with more vegetative growth and higher yield. Comparative data available. Cultivar. Seed.

PI 559370. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Caviness, C.E., Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas 72701, United States; and Agricultural Research Service -- USDA. Received 1991.

origin: United States. developed: C.E. Caviness, R.D. Riggs, H.J. Walters. origin institute: Arkansas Agr. Exp. Sta., Arkansas United States. cultivar: Mack. pedigree: Derived from a bulk of 7 uniform F4 lines from cross [(NC55 (3) x S62-5-16-12) x RA63-19-2] x Lee 68. other id: CV-93. source: Crop Sci. 12(3):396 1972. group: CSR-SOYBEAN. remarks: Maturity Group V. Resistant to Phytophthora megasperma and race 3 of soybean-cyst nematode. Flowers purple. Pubescence tawny. Pod walls light tan. Seedcoats yellow, shiny luster. Hila black. Shatter resistant. Susceptible to root-knot nematodes. Comparative data available. Cultivar. Seed.

PI 559371. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Caviness, C.E., Arkansas Agr. Exp. Sta., University of Arkansas, Fayetteville, Arkansas 72701, United States; and Agricultural Research Service -- USDA. Received 1991.

origin: United States. developed: C.E. Caviness, H.J. Walters. origin institute: Arkansas Agr. Exp. Sta., Arkansas United States. cultivar: Hood 75. pedigree: Originated from composite of 12 F4 lines from the seventh backcross, Hood 8 x Arksoy. other id: CV-111. source: Crop Sci. 16(5):741 1976. group: CSR-SOYBEAN. remarks: Flowers purple. Pubescence gray. Seed yellow. Hila buff. Susceptible to race 4 of Phytophthora megasperma var. sojae. Cultivar. Seed.

PI 559372. X Triticosecale sp. POACEAE Triticale

Donated by: Karow, R.S., Oregon Agr. Exp. Sta., Dept. of Crop & Soil Science, Oregon State University, Corvallis, Oregon 97331-3002, United States. Received January 23, 1991.

origin: United States. developed: R.S. Karow, M.F.
Kolding. origin institute: Oregon Agr. Exp. Sta., Dept.
of Crop & Soil Science, Oregon State University,
Corvallis, Oregon 97331-3002 United States. origin
institute id: FT80068-R001. cultivar: BREAKER.
pedigree: Daws / Snoopy / / M75-8646. remarks: Tall,
stiff-straw, winter hardy hexaploid. Glumes white. Outer
glume awns range from 5mm (basal) to 30mm (distal 2/3).
Spike linear, fusiform to oblong, mid-dense, tends to
incline. Outer glumes glabrous, mid-long, narrow,
accunate, short (< 3mm). Rachis has mid-long hairs 3-5mm
long. Kernel brown, large, mid-long, soft, elliptical.
Germ mid-size. Appearance slight, shriveled. Kernel
crease shallow, narrow. Cheeks rounded. Kernel brush
short, mid-size to none. Good tolerance to root problems.
Winter Annual. Cultivar. Seed.</pre>

PI 559373. X Triticosecale sp. POACEAE Triticale

Donated by: Spilde, L.A., North Dakota Agr. Exp. Sta., State University Station, Box 5051, Fargo, North Dakota 58105-5051, United States. Received January 23, 1991.

# PI 559373-continued

origin: United States. developed: K.D. Kofoid. origin institute: North Dakota Agr. Exp. Sta., State University Station, Box 5051, Fargo, North Dakota 58105-5051 United States. cultivar: KARL. pedigree: Maya II / Armadillo. remarks: Awned, semidwarf, hexaploid. Maturity similar to Kramer (sister selection from the same cross). Height average 80cm, equal to most semidwarf wheats. Yields similar to those of Kramer, but test weight superior. Original cross made by CIMMYT, Mexico. Cultivar. Seed.

PI 559374. Festuca arundinacea Schreber POACEAE Tall fescue

Donated by: KWS Seeds, Inc., United States. Received January 08, 1991.

origin: United States. origin institute: KWS Seeds, Inc United States. cultivar: AZTEC. other id: PVP 9200031. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559375. Zea mays L. subsp. mays POACEAE Corn

Donated by: Holden's Foundation Seeds, Inc., United States. Received January 08, 1991.

origin: United States. origin institute: Holden's
Foundation Seeds, Inc United States. cultivar: LH222.
other id: PVP 9200032. source: Pending. group: PVPO.
patent: PVPO. Cultivar. Seed.

PI 559376. Triticum aestivum L., nom. cons. POACEAE Wheat

**Donated by:** Goertzen Seed Research, United States. Received January 08, 1991.

origin: United States. origin institute: Goertzen Seed Research United States. cultivar: DISCOVERY. other id: PVP 9200033. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559377. Lycopersicon esculentum Miller, nom. cons. SOLANACEAE Tomato

Donated by: Purdue University, United States. Received January 08, 1991.

## PI 559377-continued

origin: United States. origin institute: Purdue University United States. cultivar: PU911A. other id: PVP 9200034. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559378. Triticum aestivum L., nom. cons. POACEAE Wheat

**Donated by:** Sunderman Breeding, Inc., United States. Received January 08, 1991.

origin: United States. origin institute: Sunderman Breeding, Inc United States. cultivar: SUNSTAR II. other id: PVP 9200035. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559379. Glycine max (L.) Merr. FABACEAE Soybean

**Donated by:** Ciba-Geigy Seed Division, United States. Received January 08, 1991.

origin: United States. origin institute: Ciba-Geigy Seed Division United States. cultivar: 3311. other id: PVP 9200036. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559380. Zea mays L. subsp. mays POACEAE Corn

Donated by: ICI Seeds, Inc., United States. Received January 08, 1991.

origin: United States. origin institute: ICI Seeds, Inc United States. cultivar: ICI 193. other id: PVP 9200037. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559381. Zea mays L. subsp. mays POACEAE Corn

**Donated by:** ICI Seeds, Inc., United States. Received January 08, 1991.

origin: United States. origin institute: ICI Seeds, Inc United States. cultivar: ICI 441. other id: PVP 9200038. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559382. Zea mays L. subsp. mays POACEAE Corn

Donated by: ICI Seeds, Inc., United States. Received January 08, 1991.

origin: United States. origin institute: ICI Seeds, Inc United States. cultivar: ICI 740. other id: PVP 9200039. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559383. Zea mays L. subsp. mays POACEAE Corn

Donated by: ICI Seeds, Inc., United States. Received January 08, 1991.

origin: United States. origin institute: ICI Seeds, Inc United States. cultivar: ICI 893. other id: PVP 9200040. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559384. Zea mays L. subsp. mays POACEAE Corn

**Donated by:** ICI Seeds, Inc., United States. Received January 08, 1991.

origin: United States. origin institute: ICI Seeds, Inc United States. cultivar: ICI 986. other id: PVP 9200041. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559385. Tagetes patula L. ASTERACEAE Marigold

**Donated by:** John Bodger & Sons Company, United States. Received January 08, 1991.

origin: United States. origin institute: John Bodger & Sons Company United States. cultivar: SAFARI BOLERO. other id: PVP 9200042. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559386. Tagetes patula L. ASTERACEAE Marigold

**Donated by:** John Bodger & Sons Company, United States. Received January 08, 1991.

origin: United States. origin institute: John Bodger & Sons Company United States. cultivar: SAFARI TANGERINE. other id: PVP 9200043. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559387. Cucurbita pepo L. CUCURBITACEAE Pumpkin

Donated by: Howden Farm, United States. Received January 08, 1991.

origin: United States. origin institute: Howden Farm United States. cultivar: HOWDEN BIGGIE. other id: PVP 9200044. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559388. Nicotiana tabacum L. SOLANACEAE Tobacco

Donated by: Speight Seed Farms, United States. Received January 08, 1991.

origin: United States. origin institute: Speight Seed Farms United States. cultivar: SPEIGHT G-117. other id: PVP 9200045. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559389. Phaseolus vulgaris L. FABACEAE Navy bean

Donated by: Gen-Tec Seeds, Limited, Canada. Received January 08, 1991.

origin: Canada. origin institute: Gen-Tec Seeds, Limited Canada. cultivar: GTS 0286. other id: PVP 9200046. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559390. Phaseolus vulgaris L. FABACEAE Garden bean

Donated by: Del Monte Corporation, United States. Received January 08, 1991.

origin: United States. origin institute: Del Monte Corporation United States. cultivar: DMC 04-59. other id: PVP 9200047. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559391. Phaseolus vulgaris L. FABACEAE Garden bean

Donated by: Del Monte Corporation, United States. Received January 08, 1991.

origin: United States. origin institute: Del Monte Corporation United States. cultivar: DMC 04-88. other id: PVP 9200048. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559392. Lolium multiflorum Lam. POACEAE Annual Ryegrass

Donated by: Forbes Seed & Grain, Inc., United States. Received January 08, 1991.

origin: United States. origin institute: Forbes Seed & Grain, Inc United States. cultivar: SOUTHERN STAR. other id: PVP 9200050. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559393. Lactuca sativa L. ASTERACEAE Lettuce

Donated by: Brinker Orsetti Seed Company, Inc., United States. Received January 08, 1991.

origin: United States. origin institute: Brinker Orsetti Seed Company, Inc United States. cultivar: WESTERN RED II. other id: PVP 9200051. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559394. Phaseolus vulgaris L. FABACEAE Snap bean

**Donated by:** Rogers Brothers Seed Company, United States. Received January 08, 1991.

origin: United States. origin institute: Rogers Brothers Seed Company United States. cultivar: JADE. other id: PVP 9200052. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559395. Pisum sativum L. FABACEAE Snap peas

**Donated by:** Rogers Brothers Seed Company, United States. Received January 08, 1991.

origin: United States. origin institute: Rogers Brothers Seed Company United States. cultivar: SP 173B-3-17. other id: PVP 9200053. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559396. Gossypium hirsutum L. MALVACEAE Cotton

Donated by: Stoneville Pedigreed Seed Company, Inc., United States. Received January 08, 1991.

origin: United States. origin institute: Stoneville Pedigreed Seed Company, Inc United States. cultivar: STONEVILLE 324. other id: PVP 9200054. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559397. Glycine max (L.) Merr. FABACEAE Soybean

**Donated by:** FFR Cooperative, United States. Received January 08, 1991.

origin: United States. origin institute: FFR Cooperative United States. cultivar: FFR 253. other id: PVP 9200055. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559398. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: FFR Cooperative, United States. Received January 08, 1991.

origin: United States. origin institute: FFR Cooperative
United States. cultivar: FFR 299. other id: PVP
9200056. source: Pending. group: PVPO. patent: PVPO.
Cultivar. Seed.

PI 559399. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: FFR Cooperative, United States. Received January 08, 1991.

origin: United States. origin institute: FFR Cooperative United States. cultivar: FFR 343. other id: PVP 9200057. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559400. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: FFR Cooperative, United States. Received January 08, 1991.

origin: United States. origin institute: FFR Cooperative
United States. cultivar: FFR 373. other id: PVP
9200058. source: Pending. group: PVPO. patent: PVPO.
Cultivar. Seed.

PI 559401 to 559403. Amelanchier alnifolia (Nutt.) Nutt. ROSACEAE Shadbush

Donated by: McArthur, E., Shrub Science Laboratory, Provo, Utah, United States. Received April 08, 1991.

- PI 559401 origin: United States. source history: Collected wild by McArthur and received at NCGR-Corvallis E. McArthur, Shrub Science Lab, Provo, Utah. pedigree: Collected from the wild in Idaho. local name: Serviceberry. collected: 1977. collector: McArthur. latitude: 42 deg. 40 min. N. longitude: 111 deg. 30 min. W. Perennial. Wild. Seed.
- PI 559402 origin: United States. source history: Collected wild by McArthur and received at NCGR-Corvallis E. McArthur, Shrub Science Lab, Provo, Utah. pedigree: Collected from the wild in Utah. local name: Serviceberry. collected: 1977. collector: McArthur. locality: Spring City Canyon. latitude: 39 deg. N. longitude: 111 deg. 30 min. W. Perennial. Wild. Seed.
- PI 559403 origin: United States. source history: Collected wild by McArthur and recieved at NGR-Corvallis Corvallis E. McArthur, Shrub Science Lab, Provo, Utah. pedigree: Collected from the wild in Utah. local name: Serviceberry. collected: 1977. collector: McArthur. locality: American Fork Canyon. Perennial. Wild. Seed.
- PI 559404 to 559405. Amelanchier alnifolia (Nutt.) Nutt. ROSACEAE Shadbush
  - Donated by: Westwood, M.N., USDA/ARS/NPGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. Received April 08, 1991.
  - PI 559404 origin: United States. source history: Collected wild by Westwood and received at NGR-Corvallis Corvallis M.N. Westwood, NGR-Corvallis/Oregon State Univ.. pedigree: Collected from the wild in Montana. local name: Serviceberry. collected: June 28, 1982. collector: M.N. Westwood. latitude: 47 deg. N. longitude: 110 deg. W. Perennial. Wild. Seed.
  - PI 559405 origin: United States. source history: Collected wild by Westwood and recieved at NCGR-Corvallis M.N. Westwood, NCGR-Corvallis/Oregon State Univ.. pedigree: Collected from the wild in Utah. local name: Serviceberry. collected: 1969. collector: M.N. Westwood. latitude: 39 deg. 30 min. N. longitude: 111 deg. 30 min. W. Perennial. Wild. Seed.
- PI 559406. Amelanchier alnifolia (Nutt.) Nutt. ROSACEAE Shadbush

  Donated by: Jahn, Otto, USDA/ARS/NPGR-Corvallis, 33447 Peoria Road,
  Corvallis, Oregon, United States. Received August 15, 1991.

origin: United States. source history: Collected wild by Jahn and recieved at NCGR-Corvallis Otto Jahn, NCGR-Corvallis. pedigree: Collected from the wild in Oregon. local name: Serviceberry. collected: August 12, 1983. collector: Otto Jahn. locality: McKenzie Pass in coniferous forest. latitude: 44 deg. 05 min. N. longitude: 122 deg. 05 min. W. elevation: 1080m. remarks: Blue-black fruit borne in clusters, round to elongate. Perennial. Wild. Seed.

PI 559407. Amelanchier alnifolia (Nutt.) Nutt. ROSACEAE Shadbush

Donated by: Jahn, Otto, USDA/ARS/NPGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. Received July 02, 1991.

origin: United States. source history: Collected wild by Jahn and received at NCGR-Corvallis Otto Jahn, NCGR-Corvallis. pedigree: Collected from the wild in Idaho. local name: Serviceberry. collected: July 02, 1984. collector: Otto Jahn. latitude: 48 deg. 40 min. N. longitude: 116 deg. 25 min. W. remarks: Regrowth from logging at this site. Perennial. Wild. Plant.

PI 559408 to 559409. Amelanchier alnifolia (Nutt.) Nutt. ROSACEAE Shadbush

Donated by: Friesen, L., University of Saskatchewan, Saskatoon, Saskatchewan, Canada. Received October 15, 1991.

- PI 559408 origin: Canada. developed: L. Friesen. origin institute: University of Saskatchewan, 33447 Peoria Road, Saskatoon, Saskatchewan Canada. source history: Seedlot received from Friesen to NGR-Corvallis Corvallis L. Friesen, University of Saskatchewan, Saskatoon. pedigree: Seed of cultivar Smoky. local name: Saskatoon Berry. remarks: See CAME 19 (PL,SD breakout) No additional information provided. Perennial. Breeding Material. Seed.
- PI 559409 origin: Canada. origin institute: University of Saskatchewan, Dept. Horticulture, Saskatoon, Saskatchewan Canada. source history: Seedlot recieved from Friesen to NGR-Corvallis Corvallis L. Friesen, University of Saskatchewan, Saskatoon. cultivar: Selection 129. pedigree: Seedling selection of OP seed of CAME 89. local name: Saskatoon Berry. remarks: See CAME 20 (PL,SD breakout). Perennial. Breeding Material. Seed.

PI 559410. Amelanchier alnifolia (Nutt.) Nutt. ROSACEAE Shadbush

Donated by: Devonian Botanical Garden, Edmonton, Alberta, Canada. Received November 07, 1991.

origin: Canada. source history: Seedlot received from Devonian Botanical Gardens to NCGR- Corvallis Devonian Botanical Gardens, Edmonton, Alberta, Canada. pedigree: Open pollinated from botanical collection. remarks: No additional information provided upon receipt. Perennial. Cultivated. Seed.

PI 559411. Amelanchier alnifolia (Nutt.) Nutt. ROSACEAE Shadbush

Donated by: Westwood, M.N., USDA/ARS/NPGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. Received July 10, 1991.

origin: United States. source history: Collected wild by
Westwood and Kyriss and recieved at NGR-Corvallis M.N.
Westwood, NGR-Corvallis/Oregon State University.
pedigree: Collected from the wild in Oregon. local name:
Serviceberry. collected: July 07, 1985. collector: M.N.
Westwood, C. Kyriss. locality: McDowell Creek Park.
latitude: 44 deg. 30 min. N. longitude: 123 deg. 30 min.
W. remarks: Fruit small, about 0.5cm diameter, dark
blue. Perennial. Wild. Seed.

PI 559412. Amelanchier alnifolia (Nutt.) Nutt. ROSACEAE Shadbush

Donated by: Ballington, J.R., North Carolina State University, Dept. Horticulture, Raleigh, North Carolina, United States. Received August 10, 1991.

origin: United States. source history: Collected wild by Ballington and Luby and recieved at NGR-Corvallis J.R. Ballington, North Carolina State University. pedigree: Collected from the wild in Oregon. local name: Serviceberry. collected: July 28, 1985. collector: J.R. Ballington, J. Luby. locality: Deschutes Nat'l Forest, river terrace near Benlam Falls. latitude: 44 deg. 12 min. N. longitude: 121 deg. 30 min. W. elevation: 1400m. remarks: Population sample, good-sized fruit. Perennial. Wild. Seed.

PI 559413 to 559414. Amelanchier alnifolia (Nutt.) Nutt. ROSACEAE Shadbush

Donated by: Reich, J., Cornell University, New York State Ag. Exp. Sta., Geneva, New York, United States. Received February 27, 1991.

#### PI 559413 to 559414-continued

- PI 559413 origin: United States. origin institute: Horticultural Research Centre, Agricultural Experiment Station, Brooks, Alberta Canada. source history: Received from Reich to NCGR-Corvallis Cultivar introduced in 1935 Jack Reich, New York State Ag. Exp. Sta., Geneva. cultivar: Altaglow. pedigree: White-fruited mutant of cultivar Saskatoon. remarks: White-fruited, pyramidal, to 5 meters. Perennial. Cultivar. Plant.
- PI 559414 origin: United States. developed: W.D. Albright. source history: Received from Reich to NCGR-Corvallis Cultivar introduced in 1956 Jack Reich, New York State Ag. Exp. Sta., Geneva. cultivar: Smoky. pedigree: Selection. remarks: Shrub to 3m, very productive of large, sweet berries, lots of root suckers. Perennial. Cultivar. Plant.
- PI 559415 to 559416. Amelanchier alnifolia (Nutt.) Nutt. ROSACEAE Shadbush

Donated by: Stushnoff, C., University of Saskatchewan, Saskatoon, Saskatchewan, Canada. Received December 15, 1991.

- PI 559415 origin: Canada. developed: Dr. C. Stushnoff. origin institute: University of Saskatchewan, Dept.
  Horticulture, Saskatoon, Saskatchewan Canada. source history: Seedlot received from Stushnoff to NCGR-Corvallis Dr. C. Stushnoff, University of Saskatchewan, Saskatoon. pedigree: Open pollinated seed of cultivar Smoky. Perennial. Breeding Material. Seed.
- PI 559416 origin: Canada. developed: C. Stushnoff. origin institute: University of Saskatchewan, Dept. Horticulture, Saskatoon, Saskatchewan Canada. source history: Seedlot recieved from Stushnoff to NCGR-Corvallis Dr. C. Stushnoff, University of Saskatchewan, Saskatoon. pedigree: Open pollinated seed of cultivar Pembina. Perennial. Breeding Material. Seed.
- PI 559417. Amelanchier alnifolia (Nutt.) Nutt. ROSACEAE Shadbush

  Donated by: Berry Botanic Garden, Portland, Oregon, United States.
  Received January 14, 1991.

origin: United States. source history: Collected wild to the Berry Botanic Garden to NCGR-Corvallis Berry Botanic Gardens, Portland, Oregon. pedigree: Collected from the wild in Oregon. locality: Columbia River Gorge. latitude: 45 deg. 35 min. N. longitude: 122 deg. 30 min. W. Perennial. Wild. Seed.

PI 559418 to 559420. Amelanchier alnifolia (Nutt.) Nutt. ROSACEAE Shadbush

Donated by: Westwood, M.N., USDA/ARS/NPGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. Received February 28, 1991.

- PI 559418 origin: United States. developed: M.N. Westwood. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon United States. source history: Seed originally collected by Westwood in Montana, grown out at OSU farm, scions received at NCGR-Corvallis M.N. Westwood, NCGR-Corvallis/Oregon State Univ.. pedigree: Seedling selection from wild seedlot from Montana. remarks: Seedling germinated after 130 days chilling. Perennial. Breeding Material. Cutting.
- PI 559419 origin: United States. developed: Mel Westwood. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon United States. source history: Seed originally collected by Westwood in Montana, grown out at OSU farm, scions received at NCGR-Corvallis M.N. Westwood, NCGR-Corvallis/Oregon State Univ.. pedigree: Seedling selection from wild seedlot from Montana. remarks: Seedling germinated after 149 days chilling. Perennial. Breeding Material. Cutting.
- PI 559420 origin: United States. developed: Mel Westwood. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon United States. source history: Seed originally collected by Westwood in Montana, grown out at OSU farm, scions received at NCGR-Corvallis M.N. Westwood, NCGR-Corvallis/Oregon State Univ.. pedigree: Seedling selection from wild seedlot from Montana. remarks: Seedling germinated after 137 days chilling. Perennial. Breeding Material. Cutting.
- PI 559421 to 559423. Amelanchier alnifolia (Nutt.) Nutt. ROSACEAE Shadbush

Donated by: Turner, Jill, University of Saskatchewan, Saskatoon, Saskatchewan, Canada. Received September 25, 1991.

- PI 559421 origin: Canada. origin institute: University of Saskatchewan, Dept. Hort. Sci., Saskatoon, Saskatchewan Canada. source history: Seed received from Turner in Saskatoon, Canada to NCGR- Corvallis Jill Turner, University of Saskatchewan, Saskatoon. pedigree: Open pollinated (?) seed of cultivar Borowetz. Perennial. Breeding Material. Seed.
- PI 559422 origin: Canada. origin institute: University of Saskatchewan, Dept. Hort. Sci., Saskatoon, Saskatchewan Canada. source history: Seed received from Turner in Saskatoon, Canada to NCGR- Corvallis Jill Turner, University of Saskatchewan, Saskatoon. pedigree: Open-pollinated (?) seed of cultivar Honeywood. Perennial. Breeding Material. Seed.
- PI 559423 origin: Canada. source history: Seed collected wild in Saskatchewan to J. Turner to NGR- Corvallis Jill Turner, University of Saskatchewan, Saskatoon. pedigree: Collected from the wild in North Central Saskatchewan. latitude: 52 deg. 10 min. N. longitude: 106 deg. 38 min. W. remarks: No additional information provided upon receipt. Perennial. Wild. Seed.
- PI 559424. Amelanchier alnifolia (Nutt.) Nutt. ROSACEAE Shadbush

**Donated by:** Carlton Nurseries, Dayton, Oregon, United States. Received January 10, 1991.

origin: United States. developed: J. Candiran. source history: Scionwood received from Carlton Nurseries to NCGR-Corvallis Carlton Nurseries, Dayton, Oregon. cultivar: Regent. pedigree: Selection. remarks: Semi-dwarf shrub to 2m, selected for both berry production and ornamental value. Perennial. Cultivar. Cutting.

PI 559425. Amelanchier alnifolia (Nutt.) Nutt. ROSACEAE Shadbush

Donated by: Hohn, R., Washington Park Arboretum, Seattle, Washington, United States. Received March 05, 1991.

origin: United States. source history: Received from Hohn to NCGR-Corvallis Dr. R. Hohn, Curator, Washington Park Arb., Seattle. pedigree: Collected from the wild in Washington. locality: Lake Chelan Nat'l Rec. Area, Pacific Crest Trail. latitude: 47 deg. 30 min. N. longitude: 120 deg. 40 min. W. elevation: 900m. Perennial. Wild. Seed.

- PI 559426 to 559428. Amelanchier alnifolia (Nutt.) Nutt. ROSACEAE Shadbush
  - Donated by: Asmus, Ken, Okios Tree Crops, Kalamazoo, Michigan, United States. Received March 22, 1991.
  - PI 559426 origin: United States. origin institute: Agriculture Canada, Research Station, Beaverlodge, Alberta Canada. source history: Received from Asmus to NCGR-Corvallis Cultivar introduced in 1960 Ken Asmus, Okios Tree Crops, Kalamazoo, Michigan. cultivar: Northline. remarks: Shrub to 1.5m, large fruits, suckers rather freely. Perennial. Cultivar. Cutting.
  - PI 559427 origin: United States. developed: J.A. Wallace. origin institute: Agriculture Canada, Experiment Station, Beaverlodge, Alberta Canada. source history: Received from Asmus to NCGR-Corvallis Cultivar introduced in 1956 Ken Asmus, Okios Tree Crops, Kalamazoo, Michigan. cultivar: Pembina. pedigree: Seedling selection. remarks: Shrub to 2.5m, very productive, full-flavored berries, few root suckers. Perennial. Cultivar. Cutting.
  - PI 559428 origin: United States. developed: J. Candiran. source history: Scionwood received from Asmus to NCGR-Corvallis Ken Asmus, Okios Tree Crops, Kalamazoo, Michigan. cultivar: Regent. pedigree: Selection. remarks: Semi-dwarf shrub to 2m, selected for both berry production and ornamental value. Perennial. Cultivar. Cutting.
- PI 559429. Amelanchier alnifolia (Nutt.) Nutt. var. alnifolia ROSACEAE Shadbush

Donated by: Chambers, H.L., USDA/ARS/NPGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. Received August 26, 1991.

origin: United States. source history: Collected wild by Chambers and received at NCGR-Corvallis H.L. Chambers, NCGR-Corvallis. pedigree: Collected from the wild in Oregon. collected: August 21, 1991. collector: H.L. Chambers. locality: 3 miles North of Camp Sherman along the Metolius River. Perennial. Wild. Cutting.

PI 559430. Amelanchier alnifolia var. cusickii (Fern.) C. Hitchc. ROSACEAE Shadbush

Donated by: Thompson, M.M., Oregon State University, Dept. Horticulture, Corvallis, Oregon, United States. Received July 12, 1991.

origin: Canada. source history: Collected wild by Thompson and received at NGR-Corvallis Corvallis Maxine Thompson, Oregon State University. pedigree: Collected from the wild in British Columbia. collected: June 24, 1989. collector: M.M. Thompson. locality: In campground beside Vaseux Lake, 5 degree slope. latitude: 49 deg. 19 min. N. longitude: 119 deg. 28 min. W. elevation: 370m. remarks: Fruit globose, blue-black w/slight bloom, from 4 plants. Perennial. Wild. Seed.

PI 559431. Amelanchier arborea (Michaux f.) Fern. ROSACEAE Shadbush

Donated by: Widrlechner, M., USDA/ARS/PIO, Ames, Iowa, United States. Received June 24, 1991.

origin: United States. source history: Collected wild by Widrlechner and recieved at NCGR- Corvallis M. Widrlechner, Plant Intro. Sta., Ames, Iowa. pedigree: Collected from the wild in Michigan. collector: Mark Widrlechner. locality: Crane Pond State Game Area, along shore of Forked Lake. latitude: 42 deg. N. longitude: 86 deg. W. elevation: 277m. Perennial. Wild. Seed.

PI 559432. Amelanchier arborea (Michaux f.) Fern. ROSACEAE Shadbush

Donated by: Hummer, K.E., USDA/ARS/NPGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. Received July 25, 1991.

origin: United States. source history: Collected wild by Ballington et al and received at NCGR- Corvallis K.E. Hummer, Curator, NCGR-Corvallis. pedigree: Collected from the wild in Pennsylvania. collected: July 23, 1991. collector: J.R. Ballington, M.M. Thompson, K.E. Hummer, M.M. Stahler. locality: Bear Meadows, top of the hill. Perennial. Wild. Seed.

PI 559433. Amelanchier asiatica (Siebold & Zucc.) Endl. ex Walp. ROSACEAE Shadbush

Donated by: Westwood, M.N., USDA/ARS/NPGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. Received April 08, 1991.

origin: Korea, Republic of. source history: Seedlot collected by M.N. Westwood at Kawanak Arboretum and received at NCGR-Corvallis M.N. Westwood, NCGR-Corvallis/Oregon State Univ.. pedigree: Open-pollinated from botanical collection. collected: September 05, 1981. collector: M.N. Westwood. Perennial. Cultivated. Seed.

PI 559434. Amelanchier asiatica (Siebold & Zucc.) Endl. ex Walp. ROSACEAE Shadbush

Donated by: Lee, T.B., Kawanak Arboretum, Suweon, Korea, Republic of. Received April 08, 1991.

origin: Korea, Republic of. source history: Seedlot collected by Lee at Kawanak Arboretum and recieved at NCGR-Corvallis T.B. Lee, Kawanak Arboretum, Suweon, South Korea. pedigree: Open-pollinated from botanical collection. collected: 1980. collector: T.B. Lee. Perennial. Cultivated. Seed.

PI 559435. Amelanchier asiatica (Siebold & Zucc.) Endl. ex Walp. ROSACEAE Shadbush

Donated by: Hort. Botan. Acad. Sci., Tashkent, Uzbekistan. Received April 24, 1991.

origin: Uzbekistan. origin institute:
USDA/ARS/NGR-Corvallis, 33447 Peoria Road, Corvallis,
Oregon United States. source history: Received from
Taschkent Acad. Sci. to NGR-Corvallis at NGR-Corvallis
Hort. Botan. Acad. Sci., Taschkent, Soviet Union.
pedigree: Open pollinated from botanical collection.
remarks: See CAME 63 (PL,SD breakout). Perennial.
Cultivated. Seed.

PI 559436. Amelanchier canadensis (L.) Medikus ROSACEAE Shadbush

Donated by: Westwood, M.N., USDA/ARS/NPGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. Received April 08, 1991.

origin: United States. source history: Collected wild by Westwood and received at NGR-Corvallis Corvallis M.N. Westwood, NGR-Corvallis/Oregon State Univ. pedigree: Collected from the wild in Oregon. collected: June 22, 1982. collector: M.N. Westwood. locality: OSU Lewis-Brown Farm. Perennial. Wild. Seed.

PI 559437. Amelanchier canadensis (L.) Medikus ROSACEAE Shadbush

Donated by: Westwood, M.N., USDA/ARS/NPGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. Received February 28, 1991.

origin: UNCERTAIN. developed: M.N. Westwood. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon United States. source history: Source in North America to Botanic Garden in Long Ashton, England, seed to OSU farm, scions received at NCGR-Corvallis M.N. Westwood, NCGR-Corvallis/Oregon State Univ.. pedigree: Seedling selection from wild seedlot. Perennial. Breeding Material. Cutting.

PI 559438. Amelanchier canadensis (L.) Medikus ROSACEAE Shadbush

Donated by: Carlton Nurseries, Dayton, Oregon, United States. Received January 10, 1991.

origin: United States. source history: Scionwood received from Carlton Nurseries to NCGR-Corvallis Carlton Nurseries, Dayton, Oregon. cultivar: Cumulus. Perennial. Cultivar. Cutting.

PI 559439. Amelanchier canadensis (L.) Medikus ROSACEAE Shadbush

Donated by: J. Frank Schmidt & Son Co., Boring, Oregon, United States. Received March 15, 1991.

origin: United States. developed: J. Frank Schmidt.
origin institute: J. Frank Schmidt & Son Co., PO Box 189,
9500 SE 327th Ave., Boring, Oregon 97009 United States.
source history: Received from Schmidt and Son Co. to
NCGR-Corvallis J. Frank Schmidt & Son Co., Boring,
Oregon. cultivar: Prince William. pedigree: A.
canadensis selection. other id: Plant Patent 6040.
group: PLNT. patent: PLNT. remarks: Multistemmed, large
shrub to 10', purplish blue fruit, autumn foliage orange
to red, white flowers in clusters. Perennial. Cultivar.
Plant.

PI 559440. Amelanchier laevis Wieg. ROSACEAE Shadbush

Donated by: Jahn, Otto, USDA/ARS/NPGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. Received September 18, 1991.

origin: Finland. source history: Seedlot collected at Mustila Arboretum, Helsinki, Finland by Jahn and recieved at NCGR-Corvallis Otto Jahn, NCGR-Corvallis. pedigree: Open pollinated from botanical collection. collected: August 09, 1985. remarks: NO SEEDLOT RECEIVED. Perennial. Cultivated. Seed.

PI 559441. Amelanchier laevis Wieg. ROSACEAE Shadbush

Donated by: J. Frank Schmidt & Son Co., Boring, Oregon, United States. Received March 15, 1991.

origin: United States. developed: J. Frank Schmidt.
origin institute: J. Frank Schmidt & Son Co., PO Box 189,
9500 SE 327th Ave., Boring, Oregon 97009 United States.
source history: Received from Schmidt and Son Co. to
NCGR-Corvallis J. Frank Schmidt & Son Co., Boring,
Oregon. cultivar: Prince Charles. pedigree: A. laevis
selection. other id: Plant Patent 6039. group: PLNT.
patent: PLNT. remarks: Upright, multistemmed tree to
25', purplish blue fruit, autumn foliage orange to red,
white flowers in clusters. Perennial. Cultivar. Plant.

PI 559442 to 559443. Amelanchier lamarckii F.-G. Schroeder ROSACEAE Shadbush

Donated by: Carlton Nurseries, Dayton, Oregon, United States. Received January 10, 1991.

- PI 559442 origin: United States. source history: Scionwood received from Carlton Nurseries to NCGR-Corvallis Carlton Nurseries, Dayton, Oregon. cultivar: Autumn Brilliance. Perennial. Cultivar. Cutting.
- PI 559443 origin: United States. source history: Scionwood received from Carlton Nurseries to NCGR-Corvallis Cultivar originated around 1920 Carlton Nurseries, Dayton, Oregon. cultivar: Robin Hill. remarks: Large flowers in slender racemes, pink in bud but fading quickly to white. Perennial. Cultivar. Cutting.
- PI 559444. Amelanchier lamarckii F.-G. Schroeder ROSACEAE Shadbush

Donated by: Greer Gardens, Eugene, Oregon, United States. Received January 10, 1991.

origin: United States. developed: H.J van de Laar. source history: Scionwood received from Greer Gardens to NCGR-Corvallis Cultivar introduced in 1980 Greer Gardens, Eugene, Oregon. cultivar: Ballerina. remarks: Large-flowered shrub or small tree. Perennial. Cultivar. Cutting.

PI 559445. Amelanchier lamarckii F.-G. Schroeder ROSACEAE Shadbush

Donated by: J. Frank Schmidt & Son Co., Boring, Oregon, United States. Received March 15, 1991.

#### PI 559445-continued

origin: United States. developed: J. Frank Schmidt.
origin institute: J. Frank Schmidt & Son Co., PO Box 189,
9500 SE 327th Ave., Boring, Oregon 97009 United States.
source history: Received from Schmidt and Son Co. to
NCGR-Corvallis J. Frank Schmidt & Son Co., Boring,
Oregon. cultivar: Princess Diana. pedigree: A.
grandiflora selection. other id: Plant Patent 6041.
group: PLNT. patent: PLNT. remarks: Small tree to 20',
spreading, purplish blue fruit, autumn foliage brilliant
red, white flowers in clusters. Perennial. Cultivar.
Plant.

PI 559446. Amelanchier ovalis Medikus ROSACEAE Shadbush

Donated by: Hort. Botan. Acad. Sci., Tashkent, Uzbekistan. Received April 24, 1991.

origin: Uzbekistan. origin institute:
USDA/ARS/NGR-Corvallis, 33447 Peoria Road, Corvallis,
Oregon United States. source history: Received from
Taschkent Acad. Sci. to NGR-Corvallis at NGR-Corvallis
Hort. Botan. Acad. Sci., Taschkent, Soviet Union.
pedigree: Open pollinated from botanical collection.
remarks: See CAME 64 (PL,SD breakout). Perennial.
Cultivated. Seed.

PI 559447 to 559450. Amelanchier sp. ROSACEAE Shadbush

Donated by: Westwood, M.N., USDA/ARS/NPGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. Received April 08, 1991.

- PI 559447 origin: United States. source history: Collected wild by Westwood and received at NCGR-Corvallis M.N. Westwood, NCGR-Corvallis/Oregon State Univ.. pedigree: Collected from the wild in Montana. collected: 1972. collector: M.N. Westwood. latitude: 47 deg. N. longitude: 110 deg. W. remarks: No additional information provided. Perennial. Wild. Seed.
- PI 559448 origin: United States. source history: Collected wild by Westwood and received at NCGR-Corvallis M.N. Westwood, NCGR-Corvallis/Oregon State Univ.. pedigree: Collected from the wild in Montana. collected: 1972. collector: M.N. Westwood. latitude: 47 deg. N. longitude: 110 deg. W. remarks: No additional information provided. Perennial. Wild. Seed.

#### PI 559447 to 559450-continued

- PI 559449 origin: United States. source history: Collected wild by Westwood and received at NCGR-Corvallis M.N. Westwood, NCGR-Corvallis/Oregon State Univ.. pedigree: Collected from the wild in Montana. collected: 1972. collector: M.N. Westwood. latitude: 47 deg. N. longitude: 110 deg. W. remarks: No additional information provided. Perennial. Wild. Seed.
- PI 559450 origin: United States. source history: Collected wild by Westwood and recieved at NCGR-Corvallis M.N. Westwood, NCGR-Corvallis/Oregon State Univ. pedigree: Collected from the wild in Colorado. collected: 1964. collector: M.N. Westwood. latitude: 39 deg. N. longitude: 106 deg. W. remarks: No additional information provided. Perennial. Wild. Seed.
- PI 559451 to 559459. Amelanchier sp. ROSACEAE Shadbush

Donated by: Reich, J., Cornell University, New York State Ag. Exp. Sta., Geneva, New York, United States. Received February 27, 1991.

- PI 559451 origin: United States. origin institute: Cornell
  University, Agricultural Experiment Station, Geneva, New
  York United States. source history: Received from Reich
  to NCGR-Corvallis Jack Reich, New York State Ag. Exp.
  Sta., Geneva. cultivar: Carlos. Perennial. Cultivar.
  Plant.
- PI 559452 origin: United States. origin institute: Cornell
  University, Agricultural Experiment Station, Geneva, New
  York United States. source history: Received from Reich
  to NCGR-Corvallis Jack Reich, New York State Ag. Exp.
  Sta., Geneva. cultivar: Mandan # 1. Perennial.
  Cultivar. Plant.
- PI 559453 origin: United States. origin institute: Cornell
  University, Agricultural Experiment Station, Geneva, New
  York United States. source history: Received from Reich
  to NCGR-Corvallis Jack Reich, New York State Ag. Exp.
  Sta., Geneva. cultivar: Paru Hill. Perennial.
  Cultivar. Plant.
- PI 559454 origin: United States. origin institute: Cornell
  University, Agricultural Experiment Station, Geneva, New
  York United States. source history: Received from Reich
  to NCGR-Corvallis Jack Reich, New York State Ag. Exp.
  Sta., Geneva. cultivar: Porter # 2. Perennial.
  Cultivar. Plant.

# PI 559451 to 559459-continued

- PI 559455 origin: United States. origin institute: Cornell
  University, Agricultural Experiment Station, Geneva, New
  York United States. source history: Received from Reich
  to NCGR-Corvallis Jack Reich, New York State Ag. Exp.
  Sta., Geneva. cultivar: Sweezy. Perennial. Cultivar.
  Plant.
- PI 559456 origin: United States. origin institute: Cornell
  University, Agricultural Experiment Station, Geneva, New
  York United States. source history: Received from Reich
  to NCGR-Corvallis Jack Reich, New York State Ag. Exp.
  Sta., Geneva. cultivar: 202/71. Perennial. Breeding
  Material. Plant.
- PI 559457 origin: United States. origin institute: Cornell
  University, Agricultural Experiment Station, Geneva, New
  York United States. source history: Received from Reich
  to NCGR-Corvallis Jack Reich, New York State Ag. Exp.
  Sta., Geneva. cultivar: 218/71. Perennial. Breeding
  Material. Plant.
- PI 559458 origin: United States. origin institute: Cornell
  University, Agricultural Experiment Station, Geneva, New
  York United States. source history: Received from Reich
  to NCGR-Corvallis Jack Reich, New York State Ag. Exp.
  Sta., Geneva. cultivar: 267/71. Perennial. Breeding
  Material. Plant.
- PI 559459 origin: United States. origin institute: Cornell
  University, Agricultural Experiment Station, Geneva, New
  York United States. source history: Received from Reich
  to NCGR-Corvallis Jack Reich, New York State Ag. Exp.
  Sta., Geneva. cultivar: Slate. Perennial. Cultivar.
  Plant.
- PI 559460 to 559461. Amelanchier utahensis Koehne ROSACEAE Shadbush

Donated by: Jahn, Otto, USDA/ARS/NPGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. Received September 15, 1991.

PI 559460 origin: United States. source history: Collected wild by Jahn and recieved at NCGR-Corvallis Otto Jahn, NCGR-Corvallis. pedigree: Collected from the wild in California. collector: Otto Jahn. locality: Plumas National Forest along a logging road. latitude: 39 deg. 55 min. N. longitude: 121 deg. 30 min. W. elevation: 1500m. remarks: Light to moderate crop, some disease evident. Perennial. Wild. Seed.

## PI 559460 to 559461-continued

PI 559461 origin: United States. source history: Collected wild by Jahn and recieved at NCGR-Corvallis Otto Jahn, NCGR-Corvallis. pedigree: Collected from the wild in California. collector: Otto Jahn. locality: Plumas National Forest along bank of S. Fork Feather River. latitude: 39 deg. 40 min. N. longitude: 121 deg. W. elevation: 1910m. remarks: Light fruit crop, typical otherwise. Perennial. Wild. Seed.

PI 559462. Amelanchier utahensis Koehne ROSACEAE Shadbush

Donated by: Westwood, M.N., USDA/ARS/NPGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. Received February 28, 1991.

origin: United States. developed: M.N. Westwood. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon United States. source history: Seed originally collected by Westwood in Utah, grown out at OSU farm, scions received at NCGR-Corvallis M.N. Westwood, NCGR-Corvallis/Oregon State Univ.. pedigree: Seedling selection from wild seedlot from Utah. remarks: Seedling germinated after 70 days chilling. Perennial. Breeding Material. Cutting.

PI 559463. Arbutus andrachne L. ERICACEAE Madrone

Donated by: Ticknor, R., Oregon State University, North Willamette Experiment Station, Aurora, Oregon, United States. Received February 19, 1991.

origin: United States. source history: Received from Ticknor to NCGR-Corvallis Dr. R. Ticknor, North Willamette Exp. Sta., Aurora, OR. remarks: No additional information provided upon receipt. Perennial. Cutting.

PI 559464. Arbutus arizonica (A. Gray) Sarg. ERICACEAE Madrone

Donated by: Southwestern Native Seeds, Tucson, Arizona, United States. Received January 30, 1991.

origin: United States. origin institute:
USDA/ARS/NGR-Corvallis, 33447 Peoria Road, Corvallis,
Oregon United States. source history: Received from
Southwestern Native Seeds to NGR-Corvallis selected at
NGR-Corvallis Southwestern Native Seeds, Tucson, Arizona.
pedigree: Open-pollinated from botanical collection.
remarks: No additional information provided upon receipt.
Perennial. Cultivated. Seed.

PI 559465. Arbutus menziesii Pursh ERICACEAE Madrone

Donated by: Hunt, Lisa, USDA/ARS/NPGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. Received August 15, 1991.

origin: United States. source history: Collected wild by Hunt and received at NCGR-Corvallis Lisa Hunt, NCGR-Corvallis. pedigree: Collected from the wild in Oregon. collected: 1986. collector: Collected by Lisa Hunt. locality: Near Monroe. latitude: 44 deg. 20 min. N. longitude: 123 deg. 20 min. W. remarks: No additional information provided. Perennial. Wild. Plant.

PI 559466 to 559468. Arbutus menziesii Pursh ERICACEAE Madrone

Donated by: Hummer, K.E., USDA/ARS/NPGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. Received October 19, 1991.

- PI 559466 origin: United States. source history: Collected wild by Hummer and received at NCGR-Corvallis Dr. K.E. Hummer, Curator/Research Leader, NCGR-Corvallis. pedigree: Collected from the wild in Oregon. collected: October 1990. collector: K.E. Hummer. locality: Rest area north of Grant's Pass, Oregon mile post 63 I5. latitude: 42 deg. 20 min. N. longitude: 123 deg. 20 min. W. Perennial. Wild. Seed.
- PI 559467 origin: United States. source history: Collected wild by Hummer and received at NCGR-Corvallis Dr. K.E. Hummer, Curator/Research Leader, NCGR-Corvallis. pedigree: Collected from the wild in Oregon. collected: October 1990. collector: K.E. Hummer. locality: Gold Hill Exit No. 40, I5. latitude: 42 deg. 20 min. N. longitude: 123 deg. 20 min. W. Perennial. Wild. Seed.
- PI 559468 origin: United States. source history: Collected wild by Hummer and received at NCGR-Corvallis Dr. K.E. Hummer, Curator/Research Leader, NCGR-Corvallis. pedigree: Collected from the wild in Oregon. collected: October 1990. collector: K.E. Hummer. locality: Valley of the Rogue Rest Area, I5. latitude: 42 deg. 20 min. N. longitude: 123 deg. 20 min. W. Perennial. Wild. Seed.

PI 559469. Arbutus menziesii Pursh ERICACEAE Madrone

Donated by: Berry Botanic Garden, Portland, Oregon, United States. Received January 03, 1991.

### PI 559469-continued

origin: United States. source history: Received from the Berry Botanic Garden to NCGR-Corvallis Berry Botanic Garden, Portland, Oregon. pedigree: Collected from the wild in Oregon. locality: Western interior valleys of Oregon. latitude: 44 deg. 30 min. N. longitude: 123 deg. W. Perennial. Wild. Seed.

PI 559470. Arbutus menziesii Pursh ERICACEAE Madrone

Donated by: Hohn, R., Washington Park Arboretum, Seattle, Washington, United States. Received March 05, 1991.

origin: United States. source history: Received from Hohn to NCGR-Corvallis Dr. T. Hohn, Curator, Washington Park Arb., Seattle. pedigree: Open pollinated from botanical collection. Perennial. Cultivated. Seed.

PI 559471. Arbutus unedo L. ERICACEAE Madrone

Donated by: Forest Farm Nursery, Williams, Oregon, United States. Received May 30, 1991.

origin: United States. origin institute: Forest Farm Nursery, 990 Tetherow Road, Willams, Oregon 97544 United States. source history: Received from Forest Farm Nursery to NCGR-Corvallis Forest Farm Nursery, Williams, Oregon. cultivar: Compacta. remarks: Compact Strawberry Bush. Perennial. Cultivar. Plant.

PI 559472. Oryza sativa L. POACEAE Rice

Donated by: Johnson, C.W., Rice Res. Sta., P.O. Box 306, Briggs, California 95917, United States. Received January 15, 1991.

origin: United States. origin institute: Calif. Coop.
Rice Res. Foundation, Inc., Rice Res. Sta., P.O. Box 306,
Briggs, California 95917 United States. cultivar:
M-204. other id: PVP 9300075. source: Pending. group:
PVPO. patent: PVPO. remarks: Maturity early. Cultivar.
Seed.

PI 559473 to 559475. Zea mays L. subsp. mays POACEAE Corn

Donated by: Vulchinkov, S., Maize Research Institute, Kneja 3230, Bulgaria. remarks: Received through L.L. Darrah, USDA-ARS, Department of Agronomy, University of Missouri, Columbia, Missouri, USA. Received February 13, 1991.

- PI 559473 to 559475-continued
  - PI 559473 donor id: Inbred 23/78B. origin: Bulgaria. collector: S. Vulchinkov. other id: BE-1809. Annual. Breeding Material. Seed.
  - PI 559474 donor id: Inbred 23-90/77B. origin: Bulgaria. collector: S. Vulchinkov. other id: BE-1809. Annual. Breeding Material. Seed.
  - PI 559475 donor id: Synthetic L. origin: Bulgaria. collector: S. Vulchinkov. other id: BE-1809. Annual. Breeding Material. Seed.
- PI 559476 to 559479. Helianthus annuus L. ASTERACEAE Sunflower

Donated by: Jan, C.C., Agricultural Research Service -- USDA, Northern Crop Science Lab, Fargo, North Dakota 58105-5677, United States. remarks: Four Sunflower Nuclear Male-Sterile Genetic Stocks. Received January 10, 1991.

- PI 559476 origin: United States. developed: C.C. Jan. origin institute: Agricultural Research Service -- USDA, Northern Crop Science Lab., Fargo, North Dakota 58105-5677 United States. cultivar: NMS HA 89-360. pedigree: Seed treatment of HA89 seed with mytomycin C or streptomycin. Sib-pollination of M3 NMS plants with heterozygous fertile plants of M3 X HA89. Sib-pollination for 2 generations followed by self-pollination. other id: GS-2. source: Crop Sci. 32(6):1519 1992. group: CSR-SUNFLOWER. restricted: CSR. remarks: Appears identical to HA89, except for male sterility, expressed as lack of visible anthers. More than 90% open-pollinated seed set. Produces 25% homozygous fertile, 50% heterozygous fertile and 25% male-sterile progeny. Spring Annual. Genetic Material. Seed.
- PI 559477 origin: United States. developed: C.C. Jan. origin institute: Agricultural Research Service -- USDA, Northern Crop Science Lab., Fargo, North Dakota 58105-5677 United States. cultivar: NMS HA 89-552. pedigree: Seed treatment of HA89 seed with mytomycin C or streptomycin. Sib-pollination of M3 NMS plants with heterozygous fertile plants of M3 X HA89. Sib-pollination for 2 generations followed by self-pollination. other id: GS-3. source: Crop Sci. 32(6):1519 1992. group: CSR-SUNFLOWER. restricted: CSR. remarks: Appears identical to HA89, except for male sterility, expressed as lack of visible anthers. More than 90% open-pollinated seed set. Produces 25% homozygous fertile, 50% heterozygous fertile and 25% male-sterile progeny. Spring Annual. Genetic Material. Seed.

# PI 559476 to 559479-continued

PI 559478 origin: United States. developed: C.C. Jan. origin institute: Agricultural Research Service -- USDA, Northern Crop Science Lab., Fargo, North Dakota 58105-5677 United States. cultivar: NMS HA 89-747. pedigree: Seed treatment of HA89 seed with mytomycin C or streptomycin. Sib-pollination of M3 NMS plants with heterozygous fertile plants of M3 X HA89. Sib-pollination for 2 generations followed by self-pollination. other id: GS-4. source: Crop Sci. 32(6):1519 1992. group: CSR-SUNFLOWER. restricted: CSR. remarks: Appears identical to HA89, except for male sterility, expressed as lack of visible anthers, and the fused stigmata. 10% open-pollinated seed set. Produces 25% homozygous fertile, 50% heterozygous fertile and 25% male-sterile progeny. Spring Annual. Genetic Material. Seed.

PI 559479 origin: United States. developed: C.C. Jan. origin institute: Agricultural Research Service -- USDA, Northern Crop Science Lab., Fargo, North Dakota 58105-5677 United States. cultivar: NMS HA 89-872. pedigree: Seed treatment of HA89 seed with mytomycin C or streptomycin. Sib-pollination of M3 NMS plants with heterozygous fertile plants of M3 X HA89. Sib-pollination for 2 generations followed by self-pollination. other id: GS-5. source: Crop Sci. 32(6):1519 1992. group: CSR-SUNFLOWER. restricted: CSR. remarks: Appears identical to HA89, except for male sterility, expressed as lack of visible anthers. More than 90% open-pollinated seed set. Produces 25% homozygous fertile, 50% heterozygous fertile and 25% male-sterile progeny. Spring Annual. Genetic Material. Seed.

# PI 559480. Helianthus annuus L. ASTERACEAE Sunflower

Donated by: Jan, C.C., Agricultural Research Service -- USDA, Northern Crop Science Lab, Fargo, North Dakota 58105-5677, United States; and North Dakota Agr. Exp. Sta.. remarks: Sunflower Genetic Stock, TETRA P21. Received January 10, 1991. origin: United States. developed: C.C. Jan. origin institute: Agricultural Research Service -- USDA, Northern Crop Science Laboratory, Fargo, North Dakota 58105 United States. cultivar: TETRA P21. pedigree: Colchicine treatment of P21. Sib-pollination of chromosomally doubled heads or sectors of heads produced 4 X P21. Self-pollination of sib-pollination of 4 X P21 to produce seed. other id: GS-1. source: Crop Sci. 32(6):1520 1992. group: CSR-SUNFLOWER. restricted: CSR. remarks: Self-compatible. 47% pollen stainability and averaged eight seeds per head upon self- or sib-pollination. Seeds black with few grey stripes, 1000 seed weight of 66g. Reduced meiotic chromosome pairing and cytologically less stable than diploid P21 progenitor. Spring Annual. Genetic Material. Seed.

## PI 559481. Helianthus annuus L. ASTERACEAE Sunflower

Donated by: Jan, C.C., Agricultural Research Service -- USDA, Northern Crop Science Lab, Fargo, North Dakota 58105-5677, United States; and North Dakota Agr. Exp. Sta.. remarks: Sunflower Amphiploid Germplasm ANN-BOL-AMP1. Received January 10, 1991.

> origin: United States. developed: C.C. Jan. origin institute: Agricultural Research Service -- USDA, Northern Crop Science Laboratory, Fargo, North Dakota 58105 United States. cultivar: ANN-BOL-AMP1. pedigree: Colchicine treatment of P21 X H. bolanderi (acc. 096-009), F1 seedlings. Sib-pollination of chromosomally doubled Fl heads to produce F2 (amphiploid) seeds. Sib-pollination of F2 amphiploids to produce F3 amphiploids. other id: GP-176. source: Crop Sci. 32(6):1513 1992. **group**: CSR-SUNFLOWER. restricted: CSR. remarks: Morphologically intermediate to its parents, P21 and H. bolanderi. Possesses 50% cultivated H. annuus and 50% H. bolanderi nuclear genes in P21 (H. annuus) cytoplasm. Annual, branched, fertile, self-incompatible. Plant height 2.0m. Seeds black with white stripes, 1000 seed weight of 5lq. Spring Annual. Breeding Material. Seed.

PI 559482 to 559483. Sorghum bicolor (L.) Moench POACEAE Grain sorghum

Donated by: Duncan, R.R., Georgia Agr. Exp. Sta., University of Georgia, Griffin, Georgia 30223-1797, United States; and Colorado Agr. Exp. Sta.. remarks: GC103 and GC104 Sorghum Germplasms. Received January 10, 1991.

PI 559482 origin: United States. developed: R.R. Duncan, R.M. Waskom, D.R. Miller, G.E. Hanning, D.A. Timm, M.W. origin institute: Georgia Agr. Exp. Sta., University of Georgia, 1109 Experiment Street, Griffin, Georgia 30223-1797 United States. cultivar: GC103. pedigree: R10 selection from TCCP75-46 (R2 family). other id: T75-46-20. other id: GP-359. source: Crop Sci. 32(4):1076 1992. group: CSR-SORGHUM. restricted: remarks: Self-pollinated selection tolerant to 50% aluminum saturation in acid soil stressed environments. Developed using mature embryo explant, tissue culture regeneration procedures and field stress evaluation techniques. Phenotypically similar to the nonregenerated RTx430 (Reg. PL140). Comparable in yield and acid soil tolerance ratings to SC283, and quite superior to the original parent RTx430 when grown under soil stress. Breeding Material. Seed.

PI 559483 origin: United States. developed: R.R. Duncan, R.M. Waskom, D.R. Miller, G.E. Hanning, D.A. Timm, M.W. Nabors. origin institute: Georgia Agr. Exp. Sta., University of Georgia, 1109 Experiment Street, Griffin, Georgia 30223-1797 United States. cultivar: GC104. pedigree: R10 selection from TCCP75-46 (R2 family). other id: T75-46-50. other id: GP-360. source: Crop Sci. 32(4):1076 1992. group: CSR-SORGHUM. restricted: CSR. remarks: Self-pollinated selection tolerant to 50% aluminum saturation in acid soil stressed environments. Developed using mature embryo explant, tissue culture regeneration procedures and field stress evaluation techniques. Phenotypically similar to the nonregenerated RTx430 (Reg. PL140). Comparable in yield and acid soil tolerance ratings to SC283, and quite superior to the original parent RTx430 when grown under soil stress. Breeding Material. Seed.

PI 559484. Hordeum vulgare L. subsp. vulgare POACEAE Barley

Donated by: Graham, Jr., W.D., South Carolina Agr. Exp. Sta., Clemson University, Clemson, South Carolina 29634, United States. remarks: Clemson 100 Barley. Received January 10, 1991.

## PI 559484-continued

origin: United States. developed: W.D. Graham, Jr., R.H. Gambrell, C.W. Myers. origin institute: South Carolina Agr. Exp. Sta., Clemson University, Clemson, South Carolina 29634 United States. cultivar: CLEMSON 100. pedigree: McNair 601 / Harrison / 2 / Gembloux and Va other id: SC821445. other id: CV-230. source: Crop Sci. 32(6):1506 1992. group: CSR-BARLEY. restricted: CSR. remarks: Maturity early. Particularly suited for double cropping systems of piedmont regions of southeastern winter barley production areas. Straw stiff. Moderately resistant to prevalent races of leaf rust (Puccinia hordei) and powdery mildew (Erysiphe graminis). Moderate resistance to scald (Rhynchosporium secalis). Six-rowed, winter feed variety. Lemma awns rough, moderately long, present only on center spikelets. Very short awns present on lateral spikelets on 1-3% of the spikes. Early growth semiprostrate. Spring Annual. Cultivar. Seed.

PI 559485 to 559491. Trifolium pratense L. FABACEAE Red clover

Donated by: Taylor, N.L., Kentucky Agr. Exp. Sta., University of Kentucky, Lexington, Kentucky 40546-0091, United States. remarks: Seven Self-Fertile Trisomic Red Clover Genetic Stocks. Received January 10, 1991.

- PI 559485 origin: United States. cultivar: 11-L38-1781. pedigree:
  Self fertile line (SF-26) X trisomic of red clover
  genome. Source of SF line unknown, thought to trace to
  line isolated by Rinke & Johnson. Trisomic consisted of
  several clones maintained vegetatively, isolated by
  Taylor & Chen. other id: GS-1. source: Crop Sci.
  32(6):1519 1992. group: CSR-CLOVER, RED. restricted:
  CSR. remarks: Plants self fertile, producing 10-15 seeds
  per head. Perennial. Genetic Material. Seed.
- PI 559486 origin: United States. cultivar: ll-L38-1782. pedigree:
  Self fertile line (SF-26) X trisomic of red clover
  genome. Source of SF line unknown, thought to trace to
  line isolated by Rinke & Johnson. Trisomic consisted of
  several clones maintained vegetatively, isolated by
  Taylor & Chen. other id: GS-2. source: Crop Sci.
  32(6):1519 1992. group: CSR-CLOVER, RED. restricted:
  CSR. remarks: Plants self fertile, producing 10-15 seeds
  per head. Perennial. Genetic Material. Seed.

- PI 559487 origin: United States. cultivar: 11-L38-1783. pedigree:
  Self fertile line (SF-26) X trisomic of red clover
  genome. Source of SF line unknown, thought to trace to
  line isolated by Rinke & Johnson. Trisomic consisted of
  several clones maintained vegetatively, isolated by
  Taylor & Chen. other id: GS-3. source: Crop Sci.
  32(6):1519 1992. group: CSR-CLOVER, RED. restricted:
  CSR. remarks: Plants self fertile, producing 10-15 seeds
  per head. Perennial. Genetic Material. Seed.
- PI 559488 origin: United States. cultivar: 11-L38-1784. pedigree:
  Self fertile line (SF-26) X trisomic of red clover
  genome. Source of SF line unknown, thought to trace to
  line isolated by Rinke & Johnson. Trisomic consisted of
  several clones maintained vegetatively, isolated by
  Taylor & Chen. other id: GS-4. source: Crop Sci.
  32(6):1519 1992. group: CSR-CLOVER, RED. restricted:
  CSR. remarks: Plants self fertile, producing 10-15 seeds
  per head. Perennial. Genetic Material. Seed.
- PI 559489 origin: United States. cultivar: 11-L38-1785. pedigree:
  Self fertile line (SF-26) X trisomic of red clover
  genome. Source of SF line unknown, thought to trace to
  line isolated by Rinke & Johnson. Trisomic consisted of
  several clones maintained vegetatively, isolated by
  Taylor & Chen. other id: GS-5. source: Crop Sci.
  32(6):1519 1992. group: CSR-CLOVER, RED. restricted:
  CSR. remarks: Plants self fertile, producing 10-15 seeds
  per head. Perennial. Genetic Material. Seed.
- PI 559490 origin: United States. cultivar: 11-L38-1786. pedigree:
  Self fertile line (SF-26) X trisomic of red clover
  genome. Source of SF line unknown, thought to trace to
  line isolated by Rinke & Johnson. Trisomic consisted of
  several clones maintained vegetatively, isolated by
  Taylor & Chen. other id: GS-6. source: Crop Sci.
  32(6):1519 1992. group: CSR-CLOVER, RED. restricted:
  CSR. remarks: Plants self fertile, producing 10-15 seeds
  per head. Perennial. Genetic Material. Seed.
- PI 559491 origin: United States. cultivar: 11-L38-1787. pedigree:
  Self fertile line (SF-26) X trisomic of red clover
  genome. Source of SF line unknown, thought to trace to
  line isolated by Rinke & Johnson. Trisomic consisted of
  several clones maintained vegetatively, isolated by
  Taylor & Chen. other id: GS-7. source: Crop Sci.
  32(6):1519 1992. group: CSR-CLOVER, RED. restricted:
  CSR. remarks: Plants self fertile, producing 10-15 seeds
  per head. Perennial. Genetic Material. Seed.

- PI 559492 to 559521. Hordeum vulgare L. subsp. vulgare POACEAE Barley
  - Donated by: Iizuka, M., Chiba University, Faculty of Horticulture, Matsudo-shi, Chiba-ken 271, Japan. remarks: Received through the IBPGR-sponsored Multipcrops Mission to Nepal, 1984. Received August 01, 1991.
  - PI 559492 donor id: I-26. origin: Nepal. local name: Jau. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: I-26. locality: Jumla. elevation: 2320m. Landrace. Seed.
  - PI 559493 donor id: I-27. origin: Nepal. local name: Jau. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: I-27. locality: Jumla. elevation: 2320m. Landrace. Seed.
  - PI 559494 donor id: I-28. origin: Nepal. local name: Owa. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: I-28. locality: Jumla. elevation: 2320m. Landrace. Seed.
  - PI 559495 donor id: I-605. origin: Nepal. local name: Lekhali jau. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: I-605. locality: Garjankot, 9 km east of Jumla. elevation: 2550m. Landrace. Seed.
  - PI 559496 donor id: I-623. origin: Nepal. local name: Jau. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: I-623. locality: Bohora, 2 km south of Jumla. elevation: 2400m. Landrace. Seed.
  - PI 559497 donor id: I-639. origin: Nepal. local name: Jau. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: I-639. locality: Burtha Bada, 2 km north of Jumla. elevation: 2380m. Landrace. Seed.
  - PI 559498 donor id: I-646. origin: Nepal. local name: Uoa. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: I-646. locality: Gudi, 26 km east of Jumla. elevation: 2850m. Landrace. Seed.
  - PI 559499 donor id: I-655. origin: Nepal. local name: Jau. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: I-655. locality: Dillikot, 23 km east of Jumla. elevation: 2810m. Landrace. Seed.

- PI 559500 donor id: I-658. origin: Nepal. local name: Oua. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: I-658. locality: Dillikot, 23 km east of Jumla. elevation: 2810m. Landrace. Seed.
- PI 559501 donor id: I-688. origin: Nepal. local name: Kalo uwa. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: I-688. locality: Muni, 23 km east of Jumla. elevation: 2900m. Landrace. Seed.
- PI 559502 donor id: I-816. origin: Nepal. local name: Kalo uwa. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: I-816. locality: Hare, north of Nepalganj. elevation: 1000m. Landrace. Seed.
- PI 559503 donor id: I-822. origin: Nepal. local name: Kalo uwa. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: I-822. locality: Chepang, north of Nepalganj. elevation: 340m. Landrace. Seed.
- PI 559504 donor id: I-841. origin: Nepal. local name: Kalo uwa. collected: December 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: I-841. locality: Ghorahi. elevation: 700m. Landrace. Seed.
- PI 559505 donor id: I-864. origin: Nepal. local name: Kalo uwa. collected: December 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: I-864. locality: Jare Pipal, 25 km south of Tansen. elevation: 780m. Landrace. Seed.
- PI 559506 donor id: I-880. origin: Nepal. local name: Kalo uwa. collected: December 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: I-880. locality: Jare Pipal, 25 km south of Tansen. elevation: 780m. Landrace. Seed.
- PI 559507 donor id: I-896. origin: Nepal. local name: Kalo uwa. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: I-896. locality: Chhinchu. elevation: 600m. Landrace. Seed.
- PI 559508 donor id: I-932. origin: Nepal. local name: Kalo uwa. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: I-932. locality: Behuli, near Jumla. elevation: 2410m. Landrace. Seed.

- PI 559509 donor id: N-2008. origin: Nepal. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: N-2008. Landrace. Seed.
- PI 559510 donor id: N-2022. origin: Nepal. local name: Wah. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: N-2022. locality: Pangum. elevation: 2800m. Landrace. Seed.
- PI 559511 donor id: N-2023. origin: Nepal. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: N-2023. Landrace. Seed.
- PI 559512 donor id: N-2045. origin: Nepal. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: N-2045. Landrace. Seed.
- PI 559513 donor id: N-2071. origin: Nepal. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakaqawara. collector id: N-2071. Landrace. Seed.
- PI 559514 donor id: N-2084. origin: Nepal. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: N-2084. Landrace. Seed.
- PI 559515 donor id: N-2106. origin: Nepal. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: N-2106. Landrace. Seed.
- PI 559516 donor id: N-2221. origin: Nepal. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: N-2221. Landrace. Seed.
- PI 559517 donor id: N-2228a. origin: Nepal. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: N-2228a. Landrace. Seed.
- PI 559518 donor id: N-2338. origin: Nepal. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: N-2338. Landrace. Seed.
- PI 559519 donor id: N-2701. origin: Nepal. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: N-2701. Landrace. Seed.
- PI 559520 donor id: N-8005. origin: Nepal. collected: 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: N-8005. Landrace. Seed.
- PI 559521 donor id: N-8052. origin: Nepal. collected: 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: N-8052. Landrace. Seed.

PI 559522. Triticum aestivum L., nom. cons. POACEAE Common wheat

Donated by: Iizuka, M., Chiba University, Faculty of Horticulture, Matsudo-shi, Chiba-ken 271, Japan. remarks: Received through the IBPGR-sponsored Multipcrops Mission to Nepal, 1984. Received August 01, 1991.

donor id: N-2111. origin: Nepal. collected: November 1984. collector: U. Nare, M. Izuka, A. Ujihara, M. Nakagawara. collector id: N-2111. locality: Jaubari Phokte. elevation: 2250m. Landrace. Seed.

PI 559523 to 559555. Triticum aestivum L., nom. cons. POACEAE Common wheat

Donated by: Smocek, Jaroslav, Cereal Research and Breeding Inst., Kromeriz, Czechoslovakia. Received August 01, 1991.

- PI 559523 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 596-4-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559524 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 600-3-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559525 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 617-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559526 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 618-1-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559527 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 618-2-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559528 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 654-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.

- PI 559529 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 695-1-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559530 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 702-3-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559531 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 704-1-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559532 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 706-1-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559533 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 708-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559534 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 715-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559535 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 716-1-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559536 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 741-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.

- PI 559537 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 754-2-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559538 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 765-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559539 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 786-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559540 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 838-1-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559541 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 871-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559542 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 892-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559543 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 945-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559544 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 964-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.

- PI 559545 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 1022-2-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559546 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 1025-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559547 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 1042-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559548 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 1071-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559549 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 1088-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559550 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 1114-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559551 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 1147-90. remarks: Source of Spike Fertility Gene (SFG). Breeding Material. Seed.
- PI 559552 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 588-90. remarks: Source of Screwed Spike Gene (SCR). Breeding Material. Seed.

- PI 559523 to 559555-continued
  - PI 559553 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 1062-90. remarks: Source of Screwed Spike Gene (SCR). Breeding Material. Seed.
  - PI 559554 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 1295-90. remarks: Source of Screwed Spike Gene (SCR). Breeding Material. Seed.
  - PI 559555 origin: Czechoslovakia. developed: J. Smocek. origin institute: Cereal Res. & Breeding Inst., Kromeriz Czechoslovakia. origin institute id: KM 1305-90. remarks: Source of Screwed Spike Gene (SCR). Breeding Material. Seed.
- PI 559556. Hordeum vulgare subsp. spontaneum (K. Koch) Thell. POACEAE

Donated by: Metzger, R.J., USDA-ARS, Oregon State University, Oregon State University, Corvallis, Oregon 97330, United States. Received August 01, 1991.

donor id: 84TK128-029.0. origin: Turkey. collected: June 1984. collector: M. Kanbertay, C. Tuten, Aegean Agric. Res. Center, Menemen R.J. Metzger, USDA-ARS; S. Jana, Univ. of Saskatchewan. collector id: 84TK128-029.0. locality: 20.5 km north of Ceylanpinar. elevation: 375m. Wild. Seed.

PI 559557 to 559629. Triticum aestivum L., nom. cons. POACEAE Common wheat

**Donated by:** Metzger, R.J., USDA-ARS, Oregon State University, Oregon State University, Corvallis, Oregon 97330, United States. Received August 01, 1991.

PI 559557 donor id: 84TK085-029.0. origin: Turkey. local name:
AK02. collected: June 1984. collector: M. Kanbertay, C.
Tuten, Aegean Agric. Res. Inst., Menemen R.J. Metzger,
USDA-ARS; S. Jana, Univ. of Saskatchewan. collector id:
84TK085-029.0. locality: Regional Agric. Res. Station,
Diyarbakir. elevation: 820m. Cultivated. Seed.

- PI 559558 donor id: 84TK085-034.0. origin: Turkey. cultivar:
  DILLE 74. collected: June 1984. collector: M.
  Kanbertay, C. Tuten, Aegean Agric. Res. Inst., Menemen
  R.J. Metzger, USDA-ARS; S. Jana, Univ. of Saskatchewan.
  collector id: 84TK085-034.0. locality: Regional Agric.
  Res. Station, Diyarbakir. elevation: 820m. Cultivated.
  Seed.
- PI 559559 donor id: 84TK085-035.0. origin: Turkey. cultivar:
  ANKARA 093/44. collected: June 1984. collector: M.
  Kanbertay, C. Tuten, Aegean Agric. Res. Inst., Menemen
  R.J. Metzger, USDA-ARS; S. Jana, Univ. of Saskatchewan.
  collector id: 84TK085-035.0. locality: Regional Agric.
  Res. Station, Diyarbakir. elevation: 820m. Cultivar.
  Seed.
- PI 559560 donor id: 84TK085-043.0. origin: Turkey. cultivar:
  GEREK 79. collected: June 1984. collector: M.
  Kanbertay, C. Tuten, Aegean Agric. Res. Inst., Menemen
  R.J. Metzger, USDA-ARS; S. Jana, Univ. of Saskatchewan.
  collector id: 84TK085-043.0. locality: Regional Agric.
  Res. Station, Diyarbakir. elevation: 820m. Cultivar.
  Seed.
- PI 559561 donor id: 84TK085-047.0. origin: Turkey. cultivar:
  YEKTAY. collected: June 1984. collector: M. Kanbertay,
  C. Tuten, Aegean Agric. Res. Inst., Menemen R.J. Metzger,
  USDA-ARS; S. Jana, Univ. of Saskatchewan. collector id:
  84TK085-047.0. locality: Regional Agric. Res. Station,
  Diyarbakir. elevation: 820m. Cultivated. Seed.
- PI 559562 donor id: 84TK085-049.0. origin: Turkey. cultivar:
  HAYMANA 79. collected: June 1984. collector: M.
  Kanbertay, C. Tuten, Aegean Agric. Res. Inst., Menemen
  R.J. Metzger, USDA-ARS; S. Jana, Univ. of Saskatchewan.
  collector id: 84TK085-049.0. locality: Regional Agric.
  Res. Station, Diyarbakir. elevation: 820m. Cultivated.
  Seed.
- PI 559563 donor id: 84TK105-056.0. origin: Turkey. collected:
  June 1984. collector: M. Kanbertay, C. Tuten, Aegean
  Agric. Res. Inst., Menemen R.J. Metzger, USDA-ARS; S.
  Jana, Univ. of Saskatchewan. collector id:
  84TK105-056.0. locality: 3 km southwest of Dicle.
  elevation: 950m. Cultivated. Seed.
- PI 559564 donor id: 84TK221-005.0. origin: Turkey. collected:
  July 1984. collector: M. Kanbertay, C. Tuten, Aegean
  Agric. Res. Inst., Menemen R.J. Metzger, USDA-ARS; G.
  Kimber, Univ. of Missouri. collector id: 84TK221-005.0.
  locality: 17 km northwest of Balya. elevation: 450m.
  Cultivated. Seed.

- PI 559565 donor id: 84TK221-006.0. origin: Turkey. collected:
  July 1984. collector: M. Kanbertay, C. Tuten, Aegean
  Agric. Res. Inst., Menemen R.J. Metzger, USDA-ARS; G.
  Kimber, Univ. of Missouri. collector id: 84TK221-006.0.
  locality: 17 km northwest of Balya. elevation: 450m.
  Cultivated. Seed.
- PI 559566 donor id: 84TK289-003.0. origin: Turkey. collected:
  July 1984. collector: M. Kanbertay, C. Tuten, Aegean
  Agric. Res. Inst., Menemen R.J. Metzger, USDA-ARS; G.
  Kimber, Univ. of Missouri. collector id: 84TK289-003.0.
  locality: 13 km from junction toward Seven Lakes.
  elevation: 500m. Cultivated. Seed.
- PI 559567 donor id: 84TK315-002.0. origin: Turkey. collected:
  July 1984. collector: M. Kanbertay, C. Tuten, Aegean
  Agric. Res. Inst., Menemen R.J. Metzger, USDA-ARS; G.
  Kimber, Univ. of Missouri. collector id: 84TK315-002.0.
  locality: 7 km east of Erfelek junction, at Celen
  village. elevation: 50m. Cultivated. Seed.
- PI 559568 donor id: 84TK316-002.0. origin: Turkey. collected:
  July 1984. collector: M. Kanbertay, C. Tuten, Aegean
  Agric. Res. Inst., Menemen R.J. Metzger, USDA-ARS; G.
  Kimber, Univ. of Missouri. collector id: 84TK316-002.0.
  locality: 6 km west of Erfelek. elevation: 50m.
  Cultivated. Seed.
- PI 559569 donor id: 84TK318-002.0. origin: Turkey. collected:
  July 1984. collector: M. Kanbertay, C. Tuten, Aegean
  Agric. Res. Inst., Menemen R.J. Metzger, USDA-ARS; G.
  Kimber, Univ. of Missouri. collector id: 84TK318-002.0.
  locality: 20 km west of Erfelek. elevation: 600m.
  Cultivated. Seed.
- PI 559570 donor id: 84TK332-005.0. origin: Turkey. collected:
  July 1984. collector: M. Kanbertay, C. Tuten, Aegean
  Agric. Res. Inst., Menemen R.J. Metzger, USDA-ARS; G.
  Kimber, Univ. of Missouri. collector id: 84TK332-005.0.
  locality: Haymana Exp. Farm and adjacent area.
  elevation: 1150m. Cultivated. Seed.
- PI 559571 donor id: 84TK452-002.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK452-002.0. locality: 43 km northwest of Tunceli
  toward Ovacik. elevation: 1150m. Cultivated. Seed.

- PI 559572 donor id: 84TK454-002.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK454-002.0. locality: 51 km northwest of Tunceli.
  elevation: 1175m. Cultivated. Seed.
- PI 559573 donor id: 84TK454-002.1. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK454-002.1. locality: 51 km northwest of Tunceli.
  elevation: 1175m. Cultivated. Seed.
- PI 559574 donor id: 84TK455-001.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK455-001.0. locality: 53 km northwest of Tunceli.
  elevation: 1200m. Cultivated. Seed.
- PI 559575 donor id: 84TK456-002.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK456-002.0. locality: 69 km northwest of Tunceli or 3 km east of park at Yesilyazi. elevation: 1225m.
  Cultivated. Seed.
- PI 559576 donor id: 84TK475-001.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK475-001.0. locality: 8 km west of Tatvan.
  elevation: 1700m. Cultivated. Seed.
- PI 559577 donor id: 84TK478-002.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK478-002.0. locality: 3 km west of Tatvan.
  elevation: 1700m. Cultivated. Seed.
- PI 559578 donor id: 84TK479-002.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK479-002.0. locality: 1 km west of Tatvan.
  elevation: 1700m. Cultivated. Seed.
- PI 559579 donor id: 84TK480-001.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK480-001.0. locality: 0.5 km west of Tatvan.
  elevation: 1700m. Cultivated. Seed.

- PI 559580 donor id: 84TK482-001.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK482-001.0. locality: 7 km southeast of Tatvan on route to Van. elevation: 1615m. Cultivated. Seed.
- PI 559581 donor id: 84TK492-001.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK492-001.0. locality: 20 km east of Gevas along lake,
  toward Van. elevation: 1790m. Cultivated. Seed.
- PI 559582 donor id: 84TK494-006.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK494-006.0. locality: 9 km east of Van toward Ozalp.
  elevation: 1875m. Cultivated. Seed.
- PI 559583 donor id: 84TK495-003.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK495-003.0. locality: 14 km east of Van. elevation:
  1860m. Cultivated. Seed.
- PI 559584 donor id: 84TK498-003.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK498-003.0. locality: Akdamar Landing. elevation:
  1900m. Cultivated. Seed.
- PI 559585 donor id: 84TK505-006.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK505-006.0. locality: 23 km southeast of Van.
  elevation: 1825m. Cultivated. Seed.
- PI 559586 donor id: 84TK509-001.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK509-001.0. locality: 23 km southeast of Guzelsu.
  elevation: 2220m. Cultivated. Seed.
- PI 559587 donor id: 84TK510-002.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK510-002.0. locality: 30 km southeast of Guzelsu.
  elevation: 2090m. Cultivated. Seed.

- PI 559588 donor id: 84TK511-001.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK511-001.0. locality: 36 km southeast of Guzelsu.
  elevation: 1575m. Cultivated. Seed.
- PI 559589 donor id: 84TK513-002.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK513-002.0. locality: 49 km southeast of Guzelsu.
  elevation: 1925m. Cultivated. Seed.
- PI 559590 donor id: 84TK516-001.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK516-001.0. locality: 3 km west of Hakkari.
  elevation: 2000m. Cultivated. Seed.
- PI 559591 donor id: 84TK519-002.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK519-002.0. locality: 12 km west of Hakkari.
  elevation: 2200m. Cultivated. Seed.
- PI 559592 donor id: 84TK520-001.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK520-001.0. locality: 13 km west of Hakkari.
  elevation: 2150m. Cultivated. Seed.
- PI 559593 donor id: 84TK523-006.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK523-006.0. locality: Gecitli village. elevation:
  1875m. Cultivated. Seed.
- PI 559594 donor id: 84TK531-001.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK531-001.0. locality: 31 km southwest of Hakkari on road to Uludere, next to bridge over Zap River.
  elevation: 1175m. Cultivated. Seed.
- PI 559595 donor id: 84TK534-008.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK534-008.0. locality: 34 km northeast of Hakkari.
  elevation: 1500m. Cultivated. Seed.

- PI 559596 donor id: 84TK536-003.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK536-003.0. locality: 21 km southeast of
  Hakkari-Yuksekova junction. elevation: 1830m.
  Cultivated. Seed.
- PI 559597 donor id: 84TK538-002.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK538-002.0. locality: Batakli Koyu. elevation:
  1860m. Cultivated. Seed.
- PI 559598 donor id: 84TK541-001.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK541-001.0. locality: Bespinar village. elevation:
  1850m. Cultivated. Seed.
- PI 559599 donor id: 84TK543-001.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK543-001.0. locality: Cukurca Koyu. elevation:
  1910m. Cultivated. Seed.
- PI 559600 donor id: 84TK544.2-003.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK544.2-003.0. locality: Olcekli Koyu. elevation:
  1940m. Cultivated. Seed.
- PI 559601 donor id: 84TK567-001.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK567-001.0. locality: 22 km southwest of Semdinli, at
  Yaylapinar Koyu. elevation: 1175m. Cultivated. Seed.
- PI 559602 donor id: 84TK567-002.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK567-002.0. locality: 22 km southwest of Semdinli, at
  Yaylapinar Koyu. elevation: 1175m. Cultivated. Seed.
- PI 559603 donor id: 84TK571-006.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK571-006.0. locality: 29 km north of Van. elevation:
  1790m. Cultivated. Seed.

- PI 559604 donor id: 84TK575-005.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK575-005.0. locality: 23 km west of Ercis.
  elevation: 1700m. Cultivated. Seed.
- PI 559605 donor id: 84TK576.1-001.0. origin: Turkey. local name: Tir. collected: August 1984. collector: M. Kanbertay, Aegean Agric. Res. Inst., Menemen R.J. Metzger, USDA-ARS. collector id: 84TK576.1-001.0. locality: 27 km west of Ercis. elevation: 1710m. Cultivated. Seed.
- PI 559606 donor id: 84TK577-006.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK577-006.0. locality: 5 km west of Adilcevaz.
  elevation: 1700m. Cultivated. Seed.
- PI 559607 donor id: 84TK578-002.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK578-002.0. locality: 25 km west of Adilcevaz.
  elevation: 1700m. Cultivated. Seed.
- PI 559608 donor id: 84TK578-003.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK578-003.0. locality: 25 km west of Adilcevaz.
  elevation: 1700m. Cultivated. Seed.
- PI 559609 donor id: 84TK580-002.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK580-002.0. locality: 35 km west of Adilcevaz.
  elevation: 1700m. Cultivated. Seed.
- PI 559610 donor id: 84TK587-002.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK587-002.0. locality: Baykan drying platform
  (market). Cultivated. Seed.
- PI 559611 donor id: 84TK588-003.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK588-003.0. locality: 14 km northwest of junction toward Nemrut Lake. elevation: 1800m. Cultivated.
  Seed.

- PI 559612 donor id: 84TK591-002.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK591-002.0. locality: 25 km northeast of tatvan.
  elevation: 1660m. Cultivated. Seed.
- PI 559613 donor id: 84TK592-002.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK592-002.0. locality: 3 km northeast of Muradiye.
  elevation: 1775m. Cultivated. Seed.
- PI 559614 donor id: 84TK593-002.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK593-002.0. locality: 8 km northeast of Muradiye.
  elevation: 1875m. Cultivated. Seed.
- PI 559615 donor id: 84TK596-004.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK596-004.0. locality: 15 km northeast of Caldiran.
  elevation: 2100m. Cultivated. Seed.
- PI 559616 donor id: 84TK601-001.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK601-001.0. locality: 23 km east of Taslicay.
  elevation: 1850m. Cultivated. Seed.
- PI 559617 donor id: 84TK602-002.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK602-002.0. locality: 13 km east of Taslicay.
  elevation: 1800m. Cultivated. Seed.
- PI 559618 donor id: 84TK604-001.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK604-001.0. locality: 23 km west of Agri. elevation:
  1825m. Cultivated. Seed.
- PI 559619 donor id: 84TK608-001.0. origin: Turkey. local name:
  Kirik. collected: August 1984. collector: M. Kanbertay,
  Aegean Agric. Res. Inst., Menemen R.J. Metzger, USDA-ARS.
  collector id: 84TK608-001.0. locality: 6 km south of
  Erzurum toward Cat. elevation: 1840m. Cultivated.
  Seed.

- PI 559620 donor id: 84TK610-001.0. origin: Turkey. local name:
  Kirik. collected: August 1984. collector: M. Kanbertay,
  Aegean Agric. Res. Inst., Menemen R.J. Metzger, USDA-ARS.
  collector id: 84TK610-001.0. locality: Going west from
  Erzurum, then 1 km north on Kirik-Rize road. elevation:
  1875m. Cultivated. Seed.
- PI 559621 donor id: 84TK612-004.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK612-004.0. locality: 20 km north of junction toward
  Kirik. elevation: 1975m. Cultivated. Seed.
- PI 559622 donor id: 84TK613-001.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK613-001.0. locality: 25 km north of junction toward
  Kirik. elevation: 1925m. Cultivated. Seed.
- PI 559623 donor id: 84TK617-001.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK617-001.0. locality: Kirik Koyu. elevation: 2025m.
  Cultivated. Seed.
- PI 559624 donor id: 84TK621-001.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK621-001.0. locality: 44 km north of Erzurum toward
  Tortum. elevation: 1940m. Cultivated. Seed.
- PI 559625 donor id: 84TK624-002.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK624-002.0. locality: 23 km east of Tortum-Norman
  junction. elevation: 2000m. Cultivated. Seed.
- PI 559626 donor id: 84TK624-004.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK624-004.0. locality: 23 km east of Tortum-Norman
  junction. elevation: 2000m. Cultivated. Seed.
- PI 559627 donor id: 84TK626-003.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK626-003.0. locality: 10 km northeast of Aksar.
  elevation: 1500m. Cultivated. Seed.

#### PI 559557 to 559629-continued

- PI 559628 donor id: 84TK652-001.2. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK652-001.2. locality: 9 km south of Arpacay.
  elevation: 1675m. Cultivated. Seed.
- PI 559629 donor id: 84TK666-003.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK666-003.0. locality: 6 km southwest of Kagizman
  toward Karakurt; Aras River flood plain. elevation:
  1275m. remarks: Material collected from this location
  should be very cold resistant. Cultivated. Seed.
- PI 559630 to 559645. Triticum durum Desf. POACEAE Durum wheat

**Donated by:** Metzger, R.J., USDA-ARS, Oregon State University, Oregon State University, Corvallis, Oregon 97330, United States. Received August 01, 1991.

- PI 559630 donor id: 84TK085-031.0. origin: Turkey. collected:
  June 1984. collector: M. Kanbertay, C. Tuten, Aegean
  Agric. Res. Inst., Menemen R.J. Metzger, USDA-ARS; S.
  Jana, Univ. of Saskatchewan. collector id:
  84TK085-031.0. locality: Regional Agric. Res. Station,
  Diyarbakir. elevation: 820m. Landrace. Seed.
- PI 559631 donor id: 84TK085-032.0. origin: Turkey. cultivar:
  BEYAZIYE. collected: June 1984. collector: M.
  Kanbertay, C. Tuten, Aegean Agric. Res. Inst., Menemen
  R.J. Metzger, USDA-ARS; S. Jana, Univ. of Saskatchewan.
  collector id: 84TK085-032.0. locality: Regional Agric.
  Res. Station, Diyarbakir. elevation: 820m. Landrace.
  Seed.
- PI 559632 donor id: 84TK085-033.0. origin: Turkey. cultivar:
  AKBASALI. collected: June 1984. collector: M.
  Kanbertay, C. Tuten, Aegean Agric. Res. Inst., Menemen
  R.J. Metzger, USDA-ARS; S. Jana, Univ. of Saskatchewan.
  collector id: 84TK085-033.0. locality: Regional Agric.
  Res. Station, Diyarbakir. elevation: 820m. Cultivated.
  Seed.
- PI 559633 donor id: 84TK085-036.0. origin: Turkey. collected:
  June 1984. collector: M. Kanbertay, C. Tuten, Aegean
  Agric. Res. Inst., Menemen R.J. Metzger, USDA-ARS; S.
  Jana, Univ. of Saskatchewan. collector id:
  84TK085-036.0. locality: Regional Agric. Res. Station,
  Diyarbakir. elevation: 820m. Cultivated. Seed.

- PI 559634 donor id: 84TK085-037.0. origin: Turkey. collected:
  June 1984. collector: M. Kanbertay, C. Tuten, Aegean
  Agric. Res. Inst., Menemen R.J. Metzger, USDA-ARS; S.
  Jana, Univ. of Saskatchewan. collector id:
  84TK085-037.0. locality: Regional Agric. Res. Station,
  Diyarbakir. elevation: 820m. Cultivated. Seed.
- PI 559635 donor id: 84TK085-038.0. origin: Turkey. cultivar: SIVEREK. collected: June 1984. collector: M. Kanbertay, C. Tuten, Aegean Agric. Res. Inst., Menemen R.J. Metzger, USDA-ARS; S. Jana, Univ. of Saskatchewan. collector id: 84TK085-038.0. locality: Regional Agric. Res. Station, Diyarbakir. elevation: 820m. Cultivated. Seed.
- PI 559636 donor id: 84TK085-039.0. origin: Turkey. collected:
  June 1984. collector: M. Kanbertay, C. Tuten, Aegean
  Agric. Res. Inst., Menemen R.J. Metzger, USDA-ARS; S.
  Jana, Univ. of Saskatchewan. collector id:
  84TK085-039.0. locality: Regional Agric. Res. Station,
  Diyarbakir. elevation: 820m. Cultivated. Seed.
- PI 559637 donor id: 84TK085-040.0. origin: Turkey. cultivar:
  MALATAYA. collected: June 1984. collector: M.
  Kanbertay, C. Tuten, Aegean Agric. Res. Inst., Menemen
  R.J. Metzger, USDA-ARS; S. Jana, Univ. of Saskatchewan.
  collector id: 84TK085-040.0. locality: Regional Agric.
  Res. Station, Diyarbakir. elevation: 820m. Cultivar.
  Seed.
- PI 559638 donor id: 84TK085-041.0. origin: Turkey. cultivar:
  BAGACAR. collected: June 1984. collector: M. Kanbertay,
  C. Tuten, Aegean Agric. Res. Inst., Menemen R.J. Metzger,
  USDA-ARS; S. Jana, Univ. of Saskatchewan. collector id:
  84TK085-041.0. locality: Regional Agric. Res. Station,
  Diyarbakir. elevation: 820m. Cultivated. Seed.
- PI 559639 donor id: 84TK085-045.0. origin: Turkey. collected:
  June 1984. collector: M. Kanbertay, C. Tuten, Aegean
  Agric. Res. Inst., Menemen R.J. Metzger, USDA-ARS; S.
  Jana, Univ. of Saskatchewan. collector id:
  84TK085-045.0. locality: Regional Agric. Res. Station,
  Diyarbakir. elevation: 820m. Cultivated. Seed.
- PI 559640 donor id: 84TK085-050.0. origin: Turkey. collected:
  June 1984. collector: M. Kanbertay, C. Tuten, Aegean
  Agric. Res. Inst., Menemen R.J. Metzger, USDA-ARS; S.
  Jana, Univ. of Saskatchewan. collector id:
  84TK085-050.0. locality: Regional Agric. Res. Station,
  Diyarbakir. elevation: 820m. Cultivated. Seed.

- PI 559641 donor id: 84TK085-051.0. origin: Turkey. cultivar:
  DILLE 74. collected: June 1984. collector: M.
  Kanbertay, C. Tuten, Aegean Agric. Res. Inst., Menemen
  R.J. Metzger, USDA-ARS; S. Jana, Univ. of Saskatchewan.
  collector id: 84TK085-051.0. locality: Regional Agric.
  Res. Station, Diyarbakir. elevation: 820m. Cultivated.
  Seed.
- PI 559642 donor id: 84TK143-044.0. origin: Turkey. collector: M. Kanbertay, C. Tuten, Aegean Agric. Res. Inst., Menemen R.J. Metzger, USDA-ARS; S. Jana, Univ. of Saskatchewan. collector id: 84TK143-044.0. locality: 9 km northeast of Pazarcik. elevation: 800m. Landrace. Seed.
- PI 559643 donor id: 84TK154-060.0. origin: Turkey. cultivar:
  POLATI. collected: June 1984. collector: M. Kanbertay,
  Aegean Agric. Res. Inst., Menemen R.J. Metzger, USDA-ARS;
  S. Jana, Univ. of Saskatchewan. collector id:
  84TK154-060.0. locality: Aegean Agric. Res. Institute,
  Menemen. elevation: 30m. Landrace. Seed.
- PI 559644 donor id: 84TKl55-001.0. origin: Turkey. collected:
  June 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS; S. Jana, Univ. of
  Saskatchewan. collector id: 84TKl55-001.0. locality:
  Aegean Agric. Res. Station, Menemen. elevation: 30m.
  Landrace. Seed.
- PI 559645 donor id: 84TK537-003.0. origin: Turkey. collected:
  August 1984. collector: M. Kanbertay, Aegean Agric. Res.
  Inst., Menemen R.J. Metzger, USDA-ARS. collector id:
  84TK537-003.0. locality: 2 km west of Yuksekova-Daglica
  junction. elevation: 1850m. Landrace. Seed.
- PI 559646 to 559647. Triticum aestivum L., nom. cons. POACEAE Common wheat

**Donated by:** Kaiser, W.J., USDA-ARS, Regional Plant Introduction Station, Washington State University, Pullman, Washington 99164, United States. Received August 01, 1991.

- PI 559646 donor id: WJK-PRC-72. origin: China. cultivar: SICHUAN 9418. collected: June 1990. collector: W.J. Kaiser, USDA-ARS, Pullman, WA. collector id: WJK-PRC-72. locality: Chendu. Cultivar. Seed.
- PI 559647 donor id: WJK-PRC-80. origin: China. collected: June 1990. collector: W.J. Kaiser, USDA-ARS, Pullman, WA. collector id: WJK-PRC-80. locality: Zhou (20 km north of Dali), Dali Prefecture. elevation: 2100m. Cultivated. Seed.

- PI 559648 to 559652. Hordeum vulgare L. subsp. vulgare POACEAE Barley
  - Donated by: Lehman, C., Institute for Genetics and Plant Science, Akademie der Wissenschaften der DDR, Correnstrasse 3, Gatersleben 4325, Germany. Received 1991.
  - PI 559648 donor id: HOR 1319. origin: Germany. cultivar: CENADER SECHSZEILIGE TYP B. collector: Akademie der Wissenschaften der DDR, Gatersleben. collector id: HOR 1319. remarks: Resistant to Puccinia striiformis race 24 in DDR. Breeding Material. Seed.
  - PI 559649 donor id: HOR 1338. origin: Germany. cultivar: SAMANTA 26. collector: Akademie der Wissenschaften der DDR, Gatersleben. collector id: HOR 1338. remarks: Resistant to Puccinia striiformis race 24 in DDR. Cultivar. Seed.
  - PI 559650 donor id: HOR 2721. origin: Germany. cultivar: SATSUKI MUGI. pedigree: Suifu/Wase Hadaka. collector: Akademie der Wissenschaften der DDR, Gatersleben, Germany. collector id: HOR 2721. remarks: Resistant to Puccinia striiformis race 24 in DDR. Cultivar. Seed.
  - PI 559651 donor id: HOR 4176. origin: USSR. collector: Akademie der Wissenschaften der DDR, Gatersleben, Germany. collector id: HOR 4176. other id: WIR 10095. remarks: Resistant to Puccinia striiformis race 24 in DDR. Cultivated. Seed.
  - PI 559652 donor id: HOR 4219. origin: Afghanistan. collector:
    Akademie der Wissenschaften der DDR, Gatersleben,
    Germany. collector id: HOR 4219. other id: FAO 6635.
    remarks: Resistant to Puccinia striiformis race 24 in
    DDR. Landrace. Seed.
- PI 559653 to 559706. Triticum aestivum L., nom. cons. POACEAE Common wheat
  - Donated by: Dencic, Srbislav, Institute of Field and Vegetable Crops, Novi Sad, Serbia, Yugoslavia. Received August 01, 1991.
  - PI 559653 origin: Yugoslavia. cultivar: AC-13. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
  - PI 559654 origin: Yugoslavia. cultivar: BEZOSTAJA EARLY. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
  - PI 559655 origin: Yugoslavia. cultivar: BIE. collector: S.
    Dencic, Institute of Field & Vegetable Crops, Novi Sad.
    Cultivated. Seed.

- PI 559656 origin: Yugoslavia. cultivar: BT 2288. pedigree:
  Tacuari/Penjamo 64. collector: S. Dencic, Institute of
  Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559657 origin: Yugoslavia. cultivar: BURJAGENAJA 94. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559658 origin: Yugoslavia. cultivar: CELINAJA 21. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559659 origin: Yugoslavia. cultivar: CELINAJA JUBILEJNAJA. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559660 origin: Yugoslavia. cultivar: ERGET. collector: S.
  Dencic, Institute of Field & Vegetable Crops, Novi Sad.
  Cultivar. Seed.
- PI 559661 origin: Yugoslavia. cultivar: ERIT 1935 G 1573. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivated. Seed.
- PI 559662 **origin:** Yugoslavia. **cultivar:** FANTAM. **collector:** S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivated. Seed.
- PI 559663 origin: Yugoslavia. cultivar: FLAMINK BG. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559664 origin: Yugoslavia. cultivar: FLAMURA 80. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559665 origin: Yugoslavia. cultivar: HANG-CHOU. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivated. Seed.
- PI 559666 origin: Yugoslavia. cultivar: HARAMBO. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivated. Seed.
- PI 559667 origin: Yugoslavia. cultivar: HAZERA 806/75. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559668 origin: Yugoslavia. cultivar: KALYANSONA 227. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.

- PI 559669 origin: Yugoslavia. cultivar: KARABALJIKSKAJA 84. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559670 origin: Yugoslavia. cultivar: KARABALJIKSKAJA 85. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559671 origin: Yugoslavia. cultivar: KAZACKA. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivated. Seed.
- PI 559672 origin: Yugoslavia. cultivar: KAZAHSTANSKAJA 3. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559673 origin: Yugoslavia. cultivar: KAZAHSTANSKAJA 9. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559674 origin: Yugoslavia. cultivar: KAZAHSTANSKAJA RANA. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559675 origin: Yugoslavia. cultivar: KRASNOKUTNA 9. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559676 origin: Yugoslavia. cultivar: LJUTESUNE 77. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivated. Seed.
- PI 559677 origin: Yugoslavia. cultivar: LJUTSEUNE 76. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivated. Seed.
- PI 559678 origin: Yugoslavia. cultivar: LOVRIN 32. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559679 origin: Yugoslavia. cultivar: MARKOZ JUAREZ INTA. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivated. Seed.
- PI 559680 origin: Yugoslavia. cultivar: MORANDI E. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivated. Seed.
- PI 559681 origin: Yugoslavia. cultivar: NAYAB 70. pedigree:
  Penjamo 62/Gabo 55//Gabo 56/3/Tezanos Pinto Precoz/
  Nainari 60. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.

- PI 559682 origin: Yugoslavia. origin institute: Institute of Field and Vegetable Crops, Novi Sad, Serbia Yugoslavia. cultivar: NS 2960. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559683 origin: Yugoslavia. origin institute: Institute of Field and Vegetable Crops, Novi Sad, Serbia Yugoslavia. cultivar: NS 62-38. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559684 origin: Yugoslavia. cultivar: OMSKAJA 12. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559685 origin: Yugoslavia. cultivar: OMSKAJA 16. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559686 origin: Yugoslavia. cultivar: ORENBURCENAJA 6. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559687 origin: Yugoslavia. cultivar: PAVLOVSKA. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559688 origin: Yugoslavia. cultivar: RANAJA. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivated. Seed.
- PI 559689 origin: Yugoslavia. cultivar: ROSIJANKA. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivated. Seed.
- PI 559690 origin: Yugoslavia. cultivar: SAHA 3. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivated. Seed.
- PI 559691 origin: Yugoslavia. cultivar: SARATOVSKAJA 33.
  pedigree: Kitchener/Lutescens 62. collector: S. Dencic,
  Institute of Field & Vegetable Crops, Novi Sad.
  Cultivar. Seed.
- PI 559692 origin: Yugoslavia. cultivar: SARATOVSKAJA 58. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559693 origin: Yugoslavia. cultivar: SELENCA. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivated. Seed.

- PI 559694 origin: Yugoslavia. cultivar: SIBIRSKAJA 62. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559695 origin: Yugoslavia. cultivar: SIBIRSKAJA ZAKAMENSKAJ. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559696 origin: Yugoslavia. cultivar: SKOPLJANKA. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivated. Seed.
- PI 559697 origin: Yugoslavia. cultivar: SST 102. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559698 origin: Yugoslavia. cultivar: SUBOTICANKA. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivated. Seed.
- PI 559699 origin: Yugoslavia. origin institute: University of Sydney, New South Wales Australia. cultivar: SUN 25B. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559700 origin: Yugoslavia. cultivar: TENHO. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivated. Seed.
- PI 559701 origin: Yugoslavia. cultivar: TULINKA. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivated. Seed.
- PI 559702 origin: Yugoslavia. origin institute: Tulun Exp.
  Station, Irkutsk, Serbia Russian Federation. cultivar:
  TULUNSKAJA 12. collector: S. Dencic, Institute of Field
  & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559703 origin: Yugoslavia. cultivar: ULJBINKA. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559704 origin: Yugoslavia. cultivar: ULJBINKA 25. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559705 origin: Yugoslavia. cultivar: URALOCKA. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivated. Seed.

- PI 559653 to 559706-continued
  - PI 559706 origin: Yugoslavia. cultivar: ZAPOROSKAJA 60. collector: S. Dencic, Institute of Field & Vegetable Crops, Novi Sad. Cultivar. Seed.
- PI 559707 to 559716. Triticum aestivum L., nom. cons. POACEAE Common wheat

Donated by: Allan, R.E., Agricultural Research Service -- USDA, Washington State University, Pullman, Washington 99164-0420, United States. Received January 20, 1991.

- PI 559707 origin: United States. developed: R.E. Allan. origin institute: USDA-ARS/Washington Agric. Exp. Sta., Pullman, Washington United States. origin institute id: 90451ARS. pedigree: Tres / Tyee (F2 derived, F7 line). remarks: A component of Rely multiline. Awnless. Glume white. Spike club-Rht2 semidwarf. Kernels white soft, ovate to oval, germ small, crease midwide, cheeks rounded. Maturity mid-season. Kernel wt. 38.0mg or 2% > than Rely. Uniformly resistant to stripe rust races CDL 1, 25, 27, 29. Mixed for resistance to CDL 40, 43. Intermediate field resistance to leaf rust. Moderately susceptible to powdery mildew. Winter Annual. Breeding Material. Seed.
- PI 559708 origin: United States. developed: R.E. Allan. origin institute: USDA-ARS/Washington Agric. Exp. Sta., Pullman, Washington United States. origin institute id: 90452ARS. pedigree: Tres / Tyee (F2 derived, F7 line). remarks: A component of Rely multiline. Awnless. Glume white. Spike club-Rht2 semidwarf. Kernels white soft, ovate to oval, germ small, crease midwide, cheeks rounded. Maturity mid-season. Kernel wt. 38.8mg or 4.5% > than Rely. Uniformly resistant or moderately resistant to stripe rust races CDL 1, 25, 27, 29. Mixed for resistance CDL 40, 43. Intermediate field resistance to leaf rust, and powdery mildew. Winter Annual. Breeding Material. Seed.

- origin: United States. developed: R.E. Allan. origin institute: USDA-ARS/Washington Agric. Exp. Sta., Pullman, Washington United States. origin institute id: 90453ARS. pedigree: Tres / / Suwon 92 / 6\*Omar / / Webster / 2\*Omar (F2 derived, F7 line). remarks: A component of Rely multiline. Awnless. Glume white. Spike club-Rht2 semidwarf. Kernels white soft, ovate to oval, germ small, crease midwide, cheeks rounded. Maturity mid-season. Kernel wt. 35.6mg or 4.0% < than Rely. Uniformly resistant to stripe rust races CDL 1, 25, 27, 29. Susceptible to CDL 40, 43. Moderately susceptible to leaf rust. Resistant to powdery mildew. Winter Annual. Breeding Material. Seed.
- PI 559710 origin: United States. developed: R.E. Allan. origin institute: USDA-ARS/Washington Agric. Exp. Sta., Pullman, Washington United States. origin institute id: 90454ARS. pedigree: Tres / Suwon 92 / 6\*Omar / / Sel 2629 / 2\*Omar (F2 derived, F7 line). remarks: A component of Rely multiline. Awnless. Glume white. Spike club-Rht2 semidwarf. Kernels white soft, ovate to oval, germ small, crease midwide, cheeks rounded. Maturity mid-season. Kernel wt. 37.6mg or 1.1% > than Rely. Uniformly resistant or intermediate to stripe rust races CDL 1, 25, 27, 29, 40, 43. Moderate field resistance to leaf rust. Intermediate resistance to powdery mildew. Winter Annual. Breeding Material. Seed.
- PI 559711 origin: United States. developed: R.E. Allan. origin institute: USDA-ARS/Washington Agric. Exp. Sta., Pullman, Washington United States. origin institute id: 90455ARS. pedigree: Tres / / Suwon 92 / 6\*Omar / Ibis / 2\*Omar (F2 derived, F7 line). remarks: A component of Rely multiline. Awnless. Glume white. Spike club-Rht2 semidwarf. Kernels white soft, ovate to oval, germ small, crease midwide, cheeks rounded. Maturity mid-season. Kernel wt. 39.2mg or 5.7% > than Rely. Uniformly resistant to stripe rust races CDL 1, 25, 27, 29, 40, 43. Moderately susceptible to leaf rust. Intermediate resistance to powdery mildew. Winter Annual. Breeding Material. Seed.

- PI 559712 origin: United States. developed: R.E. Allan. origin institute: USDA-ARS/Washington Agric. Exp. Sta., Pullman, Washington United States. origin institute id: 90456ARS. pedigree: Tres / / CI13253 / 5\*Omar / / Ministre / 2\*Omar (F2 derived, F7 line). remarks: A component of Rely multiline. Awnless. Glume white. Spike club-Rht2 semidwarf. Kernels white soft, ovate to oval, germ small, crease midwide, cheeks rounded. Maturity mid-season. Kernel wt. 37.3mg or 0.4% > than Rely. Uniformly resistant to stripe rust races CDL 1, 25, 27, 29. Mixed for resistance to CDL 40, 43. Moderate field resistance to leaf rust. Intermediate resistance to powdery mildew. Winter Annual. Breeding Material. Seed.
- PI 559713 origin: United States. developed: R.E. Allan. origin institute: USDA-ARS/Washington Agric. Exp. Sta., Pullman, Washington United States. origin institute id: 90457ARS. pedigree: Tres / / Suwon 92 / 6\*Omar / Druchamp / 2\*Omar (F2 derived, F7 line). remarks: A component of Rely multiline. Awnless. Glume white. Spike club-Rht2 semidwarf. Kernels white soft, ovate to oval, germ small, crease midwide, cheeks rounded. Maturity mid-season. Kernel wt. 35.7mg or 4.0% < than Rely. Uniformly resistant to stripe rust races CDL 1, 25, 27, 29. Mixed resistance to CDL 40. Susceptible to CDL 43. Intermediate field resistance to leaf rust. Resistant to powdery mildew. Winter Annual. Breeding Material. Seed.
- PI 559714 origin: United States. developed: R.E. Allan. origin institute: USDA-ARS/Washington Agric. Exp. Sta., Pullman, Washington United States. origin institute id: 90458ARS. pedigree: Tres / / Suwon 92 / 6\*Omar / Sel 2629 / 2\*Omar (F2 derived, F7 line). remarks: A component of Rely multiline. Awnless. Glume white. Spike club-Rht2 semidwarf. Kernels white soft, ovate to oval, germ small, crease midwide, cheeks rounded. Maturity mid-season. Kernel wt. 37.2mg or 0.1% > than Rely. Resistant or intermediate to stripe rust races CDL 1, 27, 29, 40, 43. Mixed resistance to CDL 25. Intermediate field resistance to leaf rust. Resistant to powdery mildew. Winter Annual. Breeding Material. Seed.

# PI 559707 to 559716-continued

- PI 559715 origin: United States. developed: R.E. Allan. origin institute: USDA-ARS/Washington Agric. Exp. Sta., Pullman, Washington United States. origin institute id: 90459ARS. pedigree: Tres / / CI13253 / 5\*Omar / Ministre / 2\*Omar (F2 derived, F7 line). remarks: A component of Rely multiline. Awnless. Glume white. Spike club-Rht2 semidwarf. Kernels white soft, ovate to oval, germ small, crease midwide, cheeks rounded. Maturity mid-season. Kernel wt. 35.7mg or 3.9% < than Rely. Uniformly resistant or intermediate to stripe rust races CDL 1, 25, 27, 29. Mixed resistance to CDL 40. Susceptible to CDL 43. Intermediate field resistance to leaf rust. Resistant to powdery mildew. Winter Annual. Breeding Material. Seed.
- PI 559716 origin: United States. developed: R.E. Allan. origin institute: USDA-ARS/Washington Agric. Exp. Sta., Pullman, Washington United States. origin institute id: 90460ARS. pedigree: Tres / Cappelle Desprez (F2 derived, F7 line). remarks: A component of Rely multiline. Awnless. Glume white. Spike club-Rht2 semidwarf. Kernels white soft, ovate to oval, germ small, crease midwide, cheeks rounded. Maturity mid-season. Kernel wt. 36.2mg or 2.4% < than Rely. Uniformly resistant or intermediate to stripe rust races CDL 1, 2, 25, 27, 29, 40. Susceptible to CDL 43. Moderately susceptible to leaf rust and to powdery mildew. Winter Annual. Breeding Material. Seed.
- PI 559717. Triticum aestivum L., nom. cons. POACEAE Common wheat

Donated by: Peterson, C.J., Agricultural Research Service -- USDA, University of Nebraska, Lincoln, Nebraska 68583, United States; and Nebraska Agr. Exp. Sta.. remarks: N86L177 Wheat Germplasm. Received January 06, 1991.

origin: United States. developed: C.J. Peterson, R.A. Graybosch, P.S. Baenziger, D.R. Shelton, W.D. Worrall, L.A. Nelson, D.V. McVey, J.H. Hatchett. origin institute: Agricultural Research Service -- USDA, Dept. of Agronomy, University of Nebraska, Lincoln, Nebraska 68583 United States. origin institute id: N86L177. pedigree: Nap Hal/Lancer//Karlik 1/3/NS 622/4/Centurk/GK-Tiszataj/2/ Plainsman V. other id: group: CSR-WHEAT. restricted: CSR. remarks: Awned, white-glumed, short wheat. Height equal to Karl. Maturity similar to slightly earlier than Karl. Winterhardiness better than TAM-200 & slightly less than Karl. Leaves moderately erect. Straw very stiff. Tillering lower than commonly grown NE varieties. Possesses Sr5, plus gene(s) which confer resistance to current field races of stem rust. Mod. susceptible to current field races of leaf rust. Mod. susceptible to soilborne wheat mosaic virus. Susceptible to Great Plains biotype of Hessian fly. Lodging resist. high. Superior grain protein concentration. Breeding Material. Seed.

PI 559718. Triticum aestivum L., nom. cons. POACEAE Common wheat

Donated by: Kolding, M.F., Oregon Agr. Exp. Sta., 1910 SW 44, Pendleton, Oregon 97801, United States. Received January 06, 1991.

origin: United States. developed: M.F. Kolding. origin institute: Oregon Agric. Exp. Station, Pendleton, Oregon United States. cultivar: FW-301. pedigree:
Daws/Sm-4//McDermid/Sm-11. other id: FW81464-301.
remarks: Soft white winter wheat, mid-tall, (90 to 110cm). Maturity mid-early. White chaffed linear to fusiform lax awned (20-80mm long). Awns tend to spread. Spike tends to nod. Winter habit is semi-prostrate. Glumes glabrous, mid-long, wide with mid-wide accunate beaks (2-5mm long). Beak shoulder narrow, oblique. Kernel mid-long, ovate to elliptical, shallow narrow crease, cheeks rounded, germ mid-size, brush mid-size short. Rachilla short, hairy. Winter Annual. Cultivar. Seed.

PI 559719 to 559720. Triticum aestivum L., nom. cons. POACEAE Common wheat

Donated by: Quick, J.S., Colorado Agr. Exp. Sta., Dept. of Agronomy, Colorado State University, Fort Collins, Colorado 80523, United States. Received January 06, 1991.

PI 559719 origin: United States. developed: J.S. Quick. origin institute: Colorado Agr. Exp. Sta., Dept. of Agronomy, Colorado State University, Ft. Collins, Colorado 80523 United States. cultivar: LAMAR. pedigree: 74 F878 (Mexican dwarf)/Wings//Vona. other id: CO820009. remarks: Awned, white-chaffed wheat. Height medium. Grain yield average higher than Sandy, Baca, Carson. Plant height and maturity intermediate between Carson and Sandy. Lodging less than Sandy and Baca. Milling and baking quality equal to Baca. Well suited to dry soil conditions. Yields better than all other tall cultivars under severe low moisture conditions. Taller wheat providing adequate height for harvesting in a dry year. Tolerates long periods without water because of extensive root system and waxy covering of leaf surfaces. Cultivar. Seed.

PI 559720 origin: United States. developed: J.S. Quick. origin institute: Colorado Agr. Exp. Sta., Dept. of Agronomy, Colorado State University, Ft. Collins, Colorado 80523 United States. cultivar: YUMA. pedigree: NS14/NS25//2\*Vona. other id: CO850061. other id: PVP 930009. source: Pending. group: PVPO. patent: PVPO. remarks: Early, semidwarf hard red winter wheat. Height, maturity and coleoptile length similar to Vona, hence, adapted to all of eastern Colorado where semidwarfs may be appropriate. Grain yield superior to Vona and equal to TAM 107 & TAM 200. Test weight similar to TAM 107 in 1989 and 1990. Heat tolerance during grain filling equal to TAM 107. Leaf rust resistance superior, and wheat curl mite resistance slightly inferior to TAM 107. Grain quality superior to TAM 107, equal to Vona. Cultivar. Seed.

PI 559721. Avena sativa L. POACEAE Common oat

Donated by: Forsberg, R.A., Wisconsin Agr. Exp. Sta., Dept. of Agronomy, Univ. of Wisconsin, 1575 Linden Drive, Madison, Wisconsin 53706, United States. Received January 06, 1991.

origin: United States. developed: R.A. Forsberg. institute: Wisconsin Agr. Exp. Sta., Dept. of Agronomy, Univ. of Wisconsin, 1575 Linden Drive, Madison, Wisconsin 53706 United States. origin institute id: X5229-1. cultivar: PRAIRIE. pedigree: IL75-5743/Ogle. other id: PVP 9300120. source: Pending. group: PVPO. patent: remarks: Grain yields high in Wisconsin. Ranked first for grain yield in the USDA UMOPN in 1989 and 1990, an indication of wide adaptation. Maturity midseason. Grain color light tan. Groat % slightly above average. Test weight slightly below average. Tolerance to barley yellow dwarf virus excellent in Illinois and Wisconsin tests. Resistance to crown rust good, prior to 1991, gave way to an intermediate reaction to a race(s) present in 1991. Straw strength good but groat protein concentration below average. Groat protein yield per acre high because of high grain yields. Cultivar. Seed.

PI 559722. Trifolium pratense L. FABACEAE

Donated by: Rumbaugh, M.D., Forage and Range Research Lab., USDA-ARS, Utah State University, Logan, Utah 84322-6300, United States; and Graves, W., Cooperative Agricultural Extension, 5556 Overland Avenue, Building 4, San Diego, California, United States. Received January 1991.

donor id: GR 610. origin: Morocco. collected: July 28, 1983. other id: W6 8423. group: W6. locality: Wash area, 24km from Erachidia towards Goulmimia. elevation: 975m. remarks: Seed collected with PI 516995 Ononis natrix. Wild. Seed.

PI 559723 to 559731. Sorghum bicolor (L.) Moench POACEAE Sorghum

Donated by: Nordquist, P.T., Nebraska Agr. Exp. Sta., West Central Res. and Ext. Center, North Platte, Nebraska 69101, United States. remarks: (N82-N90) Sorghum Germplasms. Received 1991.

PI 559723 origin: United States. developed: P.T. Nordquist, S.D. Kindler, S.M. Spomer. origin institute: Nebraska Agr. Exp. Sta., West Central Res. and Ext. Center, Rt. 4, Box 46A, Nebraska United States. cultivar: N82. pedigree: Derived from KS57 x 833299. Tx623 x 833299. other id: GP-361. source: Crop Sci. 32(4):1077 1992. group: CSR-SORGHUM. restricted: CSR. remarks: Good resistance to greenbug biotype E and moderately resistant to biotype B. Annual. Breeding Material. Seed.

- PI 559724 origin: United States. developed: P.T. Nordquist, S.D. Kindler, S.M. Spomer. origin institute: Nebraska Agr. Exp. Sta., West Central Res. and Ext. Center, Rt. 4, Box 46A, Nebraska United States. cultivar: N83. pedigree: Derived from KS57 x 833311 Tx623 x 833311. other id: GP-362. source: Crop Sci. 32(4):1077 1992. group: CSR-SORGHUM. restricted: CSR. remarks: Good resistance to greenbug biotype E and susceptible to biotype B. Annual. Breeding Material. Seed.
- PI 559725 origin: United States. developed: P.T. Nordquist, S.D. Kindler, S.M. Spomer. origin institute: Nebraska Agr. Exp. Sta., West Central Res. and Ext. Center, Rt. 4, Box 46A, Nebraska United States. cultivar: N84. pedigree: Derived from KS57 x 833323 Tx623 x 833323. other id: GP-363. source: Crop Sci. 32(4):1077 1992. group: CSR-SORGHUM. restricted: CSR. remarks: Good resistance to greenbug biotype E and susceptible to biotype B. Annual. Breeding Material. Seed.
- PI 559726 origin: United States. developed: P.T. Nordquist, S.D. Kindler, S.M. Spomer. origin institute: Nebraska Agr. Exp. Sta., West Central Res. and Ext. Center, Rt. 4, Box 46A, Nebraska United States. cultivar: N85. pedigree: Derived from KS57 x 833341 Tx623 x 833341. other id: GP-364. source: Crop Sci. 32(4):1077 1992. group: CSR-SORGHUM. restricted: CSR. remarks: Good resistance to greenbug biotypes B and E. Annual. Breeding Material. Seed.
- PI 559727 origin: United States. developed: P.T. Nordquist, S.D. Kindler, S.M. Spomer. origin institute: Nebraska Agr. Exp. Sta., West Central Res. and Ext. Center, Rt. 4, Box 46A, Nebraska United States. cultivar: N86. pedigree: Derived from KS57 x 833350 Tx623 x 833350. other id: GP-365. source: Crop Sci. 32(4):1077 1992. group: CSR-SORGHUM. restricted: CSR. remarks: Good resistance to greenbug biotype E and moderately resistant to biotype B. Annual. Breeding Material. Seed.
- PI 559728 origin: United States. developed: P.T. Nordquist, S.D. Kindler, S.M. Spomer. origin institute: Nebraska Agr. Exp. Sta., West Central Res. and Ext. Center, Rt. 4, Box 46A, Nebraska United States. cultivar: N87. pedigree: Derived from KS57 x 833380 Tx623 x 833380. other id: GP-366. source: Crop Sci. 32(4):1077 1992. group: CSR-SORGHUM. restricted: CSR. remarks: Good resistance to greenbug biotype E and moderately resistant to biotype B. Annual. Breeding Material. Seed.

- PI 559729 origin: United States. developed: P.T. Nordquist, S.D. Kindler, S.M. Spomer. origin institute: Nebraska Agr. Exp. Sta., West Central Res. and Ext. Center, Rt. 4, Box 46A, Nebraska United States. cultivar: N88. pedigree: Derived from KS57 x 833416 Tx623 x 833416. other id: GP-367. source: Crop Sci. 32(4):1077 1992. group: CSR-SORGHUM. restricted: CSR. remarks: Good resistance to greenbug biotypes B and E. Annual. Breeding Material. Seed.
- PI 559730 origin: United States. developed: P.T. Nordquist, S.D. Kindler, S.M. Spomer. origin institute: Nebraska Agr. Exp. Sta., West Central Res. and Ext. Center, Rt. 4, Box 46A, Nebraska United States. cultivar: N89. pedigree: Derived from KS57 x 833476 Tx623 x 833476. other id: GP-368. source: Crop Sci. 32(4):1077 1992. group: CSR-SORGHUM. restricted: CSR. remarks: Good resistance to greenbug biotypes B and E. Annual. Breeding Material. Seed.
- PI 559731 origin: United States. developed: P.T. Nordquist, S.D. Kindler, S.M. Spomer. origin institute: Nebraska Agr. Exp. Sta., West Central Res. and Ext. Center, Rt. 4, Box 46A, Nebraska United States. cultivar: N90. pedigree: Derived from KS57 x 833563 Tx623 x 833563. other id: GP-369. source: Crop Sci. 32(4):1077 1992. group: CSR-SORGHUM. restricted: CSR. remarks: Good resistance to greenbug biotypes B and E. Annual. Breeding Material. Seed.
- PI 559732 to 559875. Sorghum bicolor (L.) Moench POACEAE Sorghum

Donated by: Voight, R.L., University of Arizona, USAID Sorghum/Millet Program, Tucson, Arizona 85721, United States; and El Lakany, M.A., Field Crops Division, UN Development Program, FAO, Taiz, Yemen. Received January 14, 1991.

- PI 559732 donor id: 693. origin: Yemen. locality: Al Kaeda.
  elevation: 1800m. remarks: Race Durra kafir. Head type
  6 semi-compact, elliptical. Seeds yellow and tan.
  Cultivated. Seed.
- PI 559733 donor id: 1275. origin: Yemen. locality: Al Sadda.
  elevation: 2300m. remarks: Race Caudatum. Head type 4
   semi-open, elongated, elliptical. Seeds black.
  Cultivated. Seed.
- PI 559734 donor id: 3120. origin: Yemen. locality: Al Karun. elevation: 1580m. remarks: Race Caudatum. Head type 6 semi-compact, elliptical. Seeds light orange. Cultivated. Seed.

# PI 559732 to 559875-continued

- PI 559735 donor id: 3126. origin: Yemen. locality: Mahl Noman. elevation: 1660m. remarks: Race Durra caudatum. Head type 4 semi-open, elongated, elliptical. Seeds white. Cultivated. Seed.
- PI 559736 donor id: 3154. origin: Yemen. locality: Akabat.
  elevation: 1670m. remarks: Race Durra kafir. Head type
  5 semi-compact, ovate. Seeds yellow orange.
  Cultivated. Seed.
- PI 559737 donor id: 3223. origin: Yemen. locality: Mahal Al Redah. elevation: 1380m. remarks: Race - Caudatum durra. Head type 4 - semi-open, elongated, elliptical. Seeds tan. Cultivated. Seed.
- PI 559738 donor id: 3240. origin: Yemen. locality: Wadi Amran. elevation: 1355m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated, elliptical. Seeds white. Cultivated. Seed.
- PI 559739 donor id: 3263. origin: Yemen. locality: Al Balad. elevation: 1360m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated, elliptical. Seeds white. Cultivated. Seed.
- PI 559740 donor id: 3305. origin: Yemen. locality: Wadi Amran. elevation: 1355m. remarks: Race Caudatum. Head type 4 semi-open, elongated, elliptical. Seeds light yellow and light black. Cultivated. Seed.
- PI 559741 donor id: 3321. origin: Yemen. locality: Aaber Al Hajar. elevation: 1360m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated, elliptical. Seeds white. Cultivated. Seed.
- PI 559742 donor id: 3323. origin: Yemen. locality: Mahal Al Redah. elevation: 1380m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated, elliptical. Seeds white. Cultivated. Seed.
- PI 559743 donor id: 3489. origin: Yemen. locality: Bayt Lahmy. elevation: 875m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated, elliptical. Seeds white and black. Cultivated. Seed.
- PI 559744 donor id: 3494. origin: Yemen. locality: Bayt Lahmy. elevation: 870m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated, elliptical. Seeds black. Cultivated. Seed.

#### PI 559732 to 559875-continued

- PI 559745 donor id: 3574. origin: Yemen. locality: Damar Al Falkah. elevation: 2520m. remarks: Race Caudatum. Head type 4 semi-open, elongated, elliptical. Seeds light black. Cultivated. Seed.
- PI 559746 donor id: 3576. origin: Yemen. locality: Damar Al Kadah. elevation: 2520m. remarks: Race - Caudatum. Head type 4 - semi-open, elongated, elliptical. Seeds black. Cultivated. Seed.
- PI 559747 donor id: 3617. origin: Yemen. locality: Damar Al Sowyda. elevation: 2540m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559748 donor id: 3620. origin: Yemen. locality: Damar. elevation: 2540m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seeds light black. Cultivated. Seed.
- PI 559749 donor id: 3739. origin: Yemen. locality: Damar Rada. elevation: 2170m. remarks: Race Durra caudatum. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seeds yellow. Cultivated. Seed.
- PI 559750 donor id: 3743. origin: Yemen. locality: Damar Rada. elevation: 2170m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559751 donor id: 3783. origin: Yemen. locality: Damar Al Kahir. elevation: 2000m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559752 donor id: 3860. origin: Yemen. locality: Al Bayda
  Abass. elevation: 1980m. remarks: Race Durra. Head
  type 7 very compact, ovate, flattened base, with
  usually a recurved peduncle. Seeds yellow. Cultivated.
  Seed.
- PI 559753 donor id: 3867. origin: Yemen. locality: Al Bayda
  Abass. elevation: 1980m. remarks: Race Durra. Head
  type 6 semi-compact, elliptical. Seeds yellow.
  Cultivated. Seed.
- PI 559754 donor id: 3868. origin: Yemen. locality: Al Bayda
  Abass. elevation: 1980m. remarks: Race Caudatum. Head
  type 6 semi-compact, elliptical. Seeds yellow.
  Cultivated. Seed.

- PI 559755 donor id: 3882. origin: Yemen. locality: Damar Al Hagmah. elevation: 2230m. remarks: Race Durra kafir. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seeds yellow. Cultivated. Seed.
- PI 559756 donor id: 3883. origin: Yemen. locality: Al Bayda Al Kooh. elevation: 2230m. remarks: Race Durra caudatum. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seeds black. Cultivated. Seed.
- PI 559757 donor id: 3887. origin: Yemen. locality: Al Bayda Al Kooh. elevation: 1980m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559758 donor id: 3912. origin: Yemen. locality: Al Bayda Al Swadyah. elevation: 2030m. remarks: Race Durra caudatum. Head type 4 semi-open, elongated, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559759 donor id: 3918. origin: Yemen. locality: Al Bayda
  Thenaem. elevation: 2010m. remarks: Race Durra
  caudatum. Head type 6 semi-compact, elliptical. Seeds
  yellow. Cultivated. Seed.
- PI 559760 donor id: 3944. origin: Yemen. locality: Al Bayda
  Thenaem. elevation: 2030m. remarks: Race Durra kafir.
  Head type 6 semi-compact, elliptical. Seeds yellow.
  Cultivated. Seed.
- PI 559761 donor id: 3948. origin: Yemen. locality: Al Bayda Al Sweda'a. elevation: 2030m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical. Seeds dark yellow. Cultivated. Seed.
- PI 559762 donor id: 3951. origin: Yemen. locality: Al Bayda Al Kohah. elevation: 2020m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated, elliptical. Seeds yellow orange. Cultivated. Seed.
- PI 559763 donor id: 3959. origin: Yemen. locality: Al Bayda
  Thenaem. elevation: 2030m. remarks: Race Durra. Head
  type 6 semi-compact, elliptical. Seeds yellow.
  Cultivated. Seed.
- PI 559764 donor id: 3987. origin: Yemen. locality: Al Bayda
  Thenaem. elevation: 2000m. remarks: Race Durra. Head
  type 6 semi-compact, elliptical. Seeds yellow.
  Cultivated. Seed.

- PI 559765 donor id: 3992. origin: Yemen. locality: Al Bayda
  Thenaem. elevation: 2010m. remarks: Race Durra
  caudatum. Head type 5 semi-compact, ovate. Seeds light
  yellow. Cultivated. Seed.
- PI 559766 donor id: 3995. origin: Yemen. locality: Al Bayda Shareh. elevation: 2020m. remarks: Race - Durra kafir. Head type 6 - semi-compact, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 559767 donor id: 4006. origin: Yemen. locality: Al Bayda
  Halsah. elevation: 1970m. remarks: Race Kafir durra.
  Head type 5 semi-compact, ovate. Seeds yellow.
  Cultivated. Seed.
- PI 559768 donor id: 4011. origin: Yemen. locality: Al Bayda Halsah. elevation: 1970m. remarks: Race - Durra caudatum. Head type 5 - semi-compact, ovate. Seeds yellow. Cultivated. Seed.
- PI 559769 donor id: 4022. origin: Yemen. locality: Al Bayda
  Halsah. elevation: 1970m. remarks: Race Kafir durra.
  Head type 6 semi-compact, elliptical. Seeds yellow.
  Cultivated. Seed.
- PI 559770 donor id: 4038. origin: Yemen. locality: Al Bayda Koraythah. elevation: 1945m. remarks: Race - Durra caudatum. Head type 6 - semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559771 donor id: 4040. origin: Yemen. locality: Al Bayda Mordum. elevation: 1945m. remarks: Race - Durra Kafir. Head type 6 - semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559772 donor id: 4045. origin: Yemen. locality: Al Bayda Masydah. elevation: 1970m. remarks: Race - Caudatum Durra. Head type 4 - semi-open, elongated, elliptical. Seeds orange. Cultivated. Seed.
- PI 559773 donor id: 4053. origin: Yemen. locality: Al Bayda Mosrah Mosreahm. elevation: 1970m. remarks: Race -Durra kafir. Head type 5 - semi-compact, ovate. Seeds light yellow. Cultivated. Seed.
- PI 559774 donor id: 4055. origin: Yemen. locality: Al Bayda Makarah. elevation: 1950m. remarks: Race Caudatum durra. Head type 6 semi-compact, elliptical. Seeds light yellow. Cultivated. Seed.

- PI 559775 donor id: 4072. origin: Yemen. locality: Al Bayda Mushrab. elevation: 2070m. remarks: Race - Durra kafir. Head type 6 - semi-compact, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 559776 donor id: 4077. origin: Yemen. locality: Al Bayda Al Rathah. elevation: 2060m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 559777 donor id: 4079. origin: Yemen. locality: Al Bayda Al Roduh. elevation: 2060m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 559778 donor id: 4081. origin: Yemen. locality: Al Bayda Al Rathah. elevation: 2060m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559779 donor id: 4082. origin: Yemen. locality: Al Bayda Al Rathah. elevation: 2060m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seeds light yellow. Cultivated. Seed.
- PI 559780 donor id: 4090. origin: Yemen. locality: Al Bayda Mathmakyn. elevation: 2060m. remarks: Race - Durra caudatum. Head type 6 - semi-compact, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 559781 donor id: 4099. origin: Yemen. locality: Al Bayda Mathmakyn. elevation: 2060m. remarks: Race - Durra. Head type 6 - semi-compact, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 559782 donor id: 4104. origin: Yemen. locality: Al Bayda Mathmakyn. elevation: 2060m. remarks: Race - Durra caudatum. Head type 6 - semi-compact, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 559783 donor id: 4105. origin: Yemen. locality: Al Bayda
  Mathmakyn. elevation: 2060m. remarks: Race Caudatum.
  Head type 4 semi-open, elongated, elliptical. Seeds
  yellow red. Cultivated. Seed.
- PI 559784 donor id: 4107. origin: Yemen. locality: Al Bayda Mathmakyn. elevation: 2060m. remarks: Race - Durra kafir. Head type 6 - semi-compact, elliptical. Seeds light yellow. Cultivated. Seed.

- PI 559785 donor id: 4110. origin: Yemen. locality: Al Bayda Alkaah. elevation: 2080m. remarks: Race - Durra caudatum. Head type 6 - semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559786 donor id: 4114. origin: Yemen. locality: Al Bayda Alzaher. elevation: 2080m. remarks: Race - Durra caudatum. Head type 6 - semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559787 donor id: 4121. origin: Yemen. locality: Al Bayda
  Alzaher. elevation: 2100m. remarks: Race Durra kafir.
  Head type 5 semi-compact, ovate. Seeds light yellow.
  Cultivated. Seed.
- PI 559788 donor id: 4127. origin: Yemen. locality: Al Bayda
  Alzaher. elevation: 2100m. remarks: Race Durra
  caudatum. Head type 4 semi-open, elongated, elliptical.
  Seeds yellow orange. Cultivated. Seed.
- PI 559789 donor id: 4131. origin: Yemen. locality: Al Bayda
  Alzaher. elevation: 2100m. remarks: Race Durra
  caudatum. Head type 4 semi-open, elongated, elliptical.
  Seeds yellow orange. Cultivated. Seed.
- PI 559790 donor id: 4141. origin: Yemen. locality: Al Bayda Alzaher. elevation: 2100m. remarks: Race - Durra caudatum. Head type 6 - semi-compact, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 559791 donor id: 4146. origin: Yemen. locality: Al Bayda Alzaher. elevation: 2100m. remarks: Race - Durra caudatum. Head type 6 - semi-compact, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 559792 donor id: 4147. origin: Yemen. locality: Al Bayda
  Alzaher. elevation: 2100m. remarks: Race Durra kafir.
  Head type 6 semi-compact, elliptical. Seeds yellow.
  Cultivated. Seed.
- PI 559793 donor id: 4148. origin: Yemen. locality: Al Bayda Alzaher. elevation: 2100m. remarks: Race - Durra caudatum. Head type 5 - semi-compact, ovate. Seeds light yellow. Cultivated. Seed.
- PI 559794 donor id: 4150. origin: Yemen. locality: Al Bayda. elevation: 2080m. remarks: Race Durra. Head type 5 semi-compact, ovate. Seeds yellow. Cultivated. Seed.

- PI 559795 donor id: 4158. origin: Yemen. locality: Al Bayda Alfwah. elevation: 2080m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seeds yellow. Cultivated. Seed.
- PI 559796 donor id: 4159. origin: Yemen. locality: Al Bayda Alfwah. elevation: 2080m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seeds yellow. Cultivated. Seed.
- PI 559797 donor id: 4171. origin: Yemen. locality: Al Bayda Alfoah. elevation: 2080m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 559798 donor id: 4173. origin: Yemen. locality: Al Bayda Alzaher. elevation: 2090m. remarks: Race - Durra kafir. Head type 5 - semi-compact, ovate. Seeds light yellow. Cultivated. Seed.
- PI 559799 donor id: 4186. origin: Yemen. locality: Al Bayda Beer Algarwy. elevation: 2050m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seeds yellow. Cultivated. Seed.
- PI 559800 donor id: 4205. origin: Yemen. locality: Al Bayda Awen. elevation: 2140m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559801 donor id: 4207. origin: Yemen. locality: Al Bayda Awen. elevation: 2140m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559802 donor id: 4210. origin: Yemen. locality: Al Bayda Awen. elevation: 2140m. remarks: Race Durra caudatum. Head type 4 semi-open, elongated, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559803 donor id: 4212. origin: Yemen. locality: Al Bayda Awen. elevation: 2010m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559804 donor id: 4217. origin: Yemen. locality: Al Bayda Alsharyah. elevation: 2010m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seeds light yellow. Cultivated. Seed.

- PI 559805 donor id: 4218. origin: Yemen. locality: Al Bayda Awen. elevation: 2010m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559806 donor id: 4219. origin: Yemen. locality: Al Bayda Awen. elevation: 2140m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559807 donor id: 4222. origin: Yemen. locality: Al Bayda Awen. elevation: 2140m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559808 donor id: 4225. origin: Yemen. locality: Al Bayda Awen. elevation: 2140m. remarks: Race Caudatum durra. Head type 5 semi-compact, ovate. Seeds yellow. Cultivated. Seed.
- PI 559809 donor id: 4226. origin: Yemen. locality: Al Bayda Awen. elevation: 2140m. remarks: Race Caudatum durra. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559810 donor id: 4230. origin: Yemen. locality: Al Bayda Awen. elevation: 2140m. remarks: Race Caudatum durra. Head type 4 semi-open, elongated, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559811 donor id: 4231. origin: Yemen. locality: Al Bayda Awen. elevation: 2140m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559812 donor id: 4232. origin: Yemen. locality: Al Bayda Awen. elevation: 2140m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559813 donor id: 4236. origin: Yemen. locality: Al Bayda Mathoken. elevation: 2090m. remarks: Race - Durra caudatum. Head type 6 - semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559814 donor id: 4237. origin: Yemen. locality: Al Bayda Mathoken. elevation: 2090m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seeds yellow. Cultivated. Seed.

- PI 559815 donor id: 4242. origin: Yemen. locality: Al Bayda
  Mathoken. elevation: 2090m. remarks: Race Durra
  caudatum. Head type 7 very compact, ovate, flattened
  base, with usually a recurved peduncle. Seeds yellow.
  Cultivated. Seed.
- PI 559816 donor id: 4246. origin: Yemen. locality: Al Bayda Mathoken. elevation: 2090m. remarks: Race - Durra kafir. Head type 4 - semi-open, elongated, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 559817 donor id: 4253. origin: Yemen. locality: Al Bayda Mathoken. elevation: 2090m. remarks: Race - Durra caudatum. Head type 6 - semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559818 donor id: 4255. origin: Yemen. locality: Al Bayda Mathoken. elevation: 2090m. remarks: Race - Durra caudatum. Head type 6 - semi-compact, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 559819 donor id: 4258. origin: Yemen. locality: Al Bayda Al Sharbah. elevation: 2070m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seeds light yellow. Cultivated. Seed.
- PI 559820 donor id: 4259. origin: Yemen. locality: Al Bayda Al Sharbah. elevation: 2070m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seeds light yellow. Cultivated. Seed.
- PI 559821 donor id: 4261. origin: Yemen. locality: Al Bayda Al Sharbah. elevation: 2070m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 559822 donor id: 4262. origin: Yemen. locality: Al Bayda Al Sharbah. elevation: 2070m. remarks: Race Durra kafir. Head type 5 semi-compact, ovate. Seeds light yellow. Cultivated. Seed.
- PI 559823 donor id: 4268. origin: Yemen. locality: Al Bayda Azat. elevation: 1990m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seeds light yellow. Cultivated. Seed.
- PI 559824 donor id: 4277. origin: Yemen. locality: Al Bayda
  Thenaem. elevation: 1990m. remarks: Race Durra. Head
  type 6 semi-compact, elliptical. Seeds yellow.
  Cultivated. Seed.

- PI 559825 donor id: 4278. origin: Yemen. locality: Al Bayda
  Thenaem. elevation: 1990m. remarks: Race Durra
  caudatum. Head type 6 semi-compact, elliptical. Seeds
  yellow. Cultivated. Seed.
- PI 559826 donor id: 4279. origin: Yemen. locality: Al Bayda
  Thenaem. elevation: 1990m. remarks: Race Durra. Head
  type 6 semi-compact, elliptical. Seeds yellow.
  Cultivated. Seed.
- PI 559827 donor id: 4281. origin: Yemen. locality: Al Bayda Azat. elevation: 1990m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 559828 donor id: 4292. origin: Yemen. locality: Al Bayda
  Thenaem. elevation: 1940m. remarks: Race Durra kafir.
  Head type 6 semi-compact, elliptical. Seeds light
  yellow. Cultivated. Seed.
- PI 559829 donor id: 4293. origin: Yemen. locality: Al Bayda
  Thenaem. elevation: 1940m. remarks: Race Durra. Head
  type 6 semi-compact, elliptical. Seeds yellow.
  Cultivated. Seed.
- PI 559830 donor id: 4298. origin: Yemen. locality: Al Bayda
  Thenaem. elevation: 1940m. remarks: Race Durra kafir.
  Head type 6 semi-compact, elliptical. Seeds light
  yellow. Cultivated. Seed.
- PI 559831 donor id: 4312. origin: Yemen. locality: Al Bayda Al Tahareyh. elevation: 2030m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559832 donor id: 4318. origin: Yemen. locality: Al Bayda Al Daharya. elevation: 2030m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559833 donor id: 4327. origin: Yemen. locality: Al Bayda Al Masher. elevation: 2030m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seeds yellow. Cultivated. Seed.
- PI 559834 donor id: 4350. origin: Yemen. locality: Al Bayda Al Redah. elevation: 2020m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seeds yellow. Cultivated. Seed.

- PI 559835 donor id: 4351. origin: Yemen. locality: Al Bayda Marda Al Aael. elevation: 2020m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 559836 donor id: 4356. origin: Yemen. locality: Al Bayda Afar. elevation: 2020m. remarks: Race Caudatum durra. Head type 6 semi-compact, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 559837 donor id: 4359. origin: Yemen. locality: Al Bayda Marda Al Aael. elevation: 2020m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seeds yellow. Cultivated. Seed.
- PI 559838 donor id: 4362. origin: Yemen. locality: Al Bayda Marda Al Aael. elevation: 2020m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seeds light yellow. Cultivated. Seed.
- PI 559839 donor id: 4371. origin: Yemen. locality: Al Bayda Afar. elevation: 2030m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559840 donor id: 4378. origin: Yemen. locality: Al Bayda Al Sowedya. elevation: 2080m. remarks: Race Caudatum durra. Head type 6 semi-compact, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 559841 donor id: 4379. origin: Yemen. locality: Al Bayda Al Sowedya. elevation: 2080m. remarks: Race Durra kafir. Head type 6 semi-compact, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 559842 donor id: 4383. origin: Yemen. locality: Al Bayda Al Sowedya. elevation: 2030m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seeds yellow. Cultivated. Seed.
- PI 559843 donor id: 4404. origin: Yemen. locality: Suk Al-Sabt. elevation: 1450m. remarks: Race Caudatum kafir. Head type 4 semi-open, elongated, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 559844 donor id: 4405. origin: Yemen. locality: Suk Al-Sabt. elevation: 1450m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.

- PI 559845 donor id: 4436. origin: Yemen. locality: Ibb Sumara. elevation: 2450m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seeds black. Cultivated. Seed.
- PI 559846 donor id: 4453. origin: Yemen. locality: Ibb Farm. elevation: 1850m. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seeds light black. Cultivated. Seed.
- PI 559847 donor id: 4464. origin: Yemen. locality: Al Bayda Al Haykal. elevation: 2140m. remarks: Race Kafir durra. Head type 6 semi-compact, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 559848 donor id: 4465. origin: Yemen. locality: Al Bayda Al Haykal. elevation: 2140m. remarks: Race Kafir durra. Head type 4 semi-open, elongated, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 559849 donor id: 4471. origin: Yemen. locality: Al Habik. elevation: 210m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seeds yellow. Cultivated. Seed.
- PI 559850 donor id: 4485. origin: Yemen. locality: Almahwit Sirah. elevation: 1045m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seeds light red. Cultivated. Seed.
- PI 559851 donor id: 4490. origin: Yemen. locality: Bait Akabat. elevation: 1670m. remarks: Race Durra caudatum. Head type 4 semi-open, elongated, elliptical. Seeds light red. Cultivated. Seed.
- PI 559852 donor id: 4496. origin: Yemen. remarks: Race Durra. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seeds black. Cultivated. Seed.
- PI 559853 donor id: 4499. origin: Yemen. locality: Al Bayda
  Abass. elevation: 1980m. remarks: Race Durra
  caudatum. Head type 7 very compact, ovate, flattened
  base, with usually a recurved peduncle. Seeds light
  yellow. Cultivated. Seed.
- PI 559854 donor id: 4503. origin: Yemen. locality: Al Bayda Ahakil. elevation: 1980m. remarks: Race Durra caudatum. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.

- PI 559855 donor id: 4505. origin: Yemen. locality: Al Bayda
  Mashrab. elevation: 2070m. remarks: Race Durra. Head
  type 7 very compact, ovate, flattened base, with
  usually a recurved peduncle. Seeds black. Cultivated.
  Seed.
- PI 559856 donor id: 4509. origin: Yemen. locality: Al Bayda Awen. elevation: 2140m. remarks: Race Durra caudatum. Head type 4 semi-open, elongated, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559857 donor id: 4510. origin: Yemen. locality: Al Bayda
  Mathoken. elevation: 2090m. remarks: Race Durra. Head
  type 6 semi-compact, elliptical. Seeds light yellow.
  Cultivated. Seed.
- PI 559858 donor id: 4515. origin: Yemen. locality: Al Bayda Al Dakik. elevation: 1970m. remarks: Race Caudatum durra. Head type 4 -semi-open, elongated, elliptical. Seeds light black and white. Cultivated. Seed.
- PI 559859 donor id: 4520. origin: Yemen. locality: Sumara Ibb. elevation: 2450m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seeds yellow. Cultivated. Seed.
- PI 559860 donor id: 4522. origin: Yemen. elevation: 215m.
  remarks: Race Durra caudatum. Head type 4 semi-open,
  elongated, elliptical. Seeds light orange. Cultivated.
  Seed.
- PI 559861 donor id: 4523. origin: Yemen. locality: Al Mahweit Al Arkoob. elevation: 1345m. remarks: Race Caudatum. Head type 4 semi-open, elongated, elliptical. Seeds light black. Cultivated. Seed.
- PI 559862 donor id: 4530. origin: Yemen. locality: Office Collection. remarks: Race Caudatum. Head type 4 semi-open, elongated, elliptical. Seeds light red and white. Cultivated. Seed.
- PI 559863 donor id: 4533. origin: Yemen. locality: Office
  Collection. remarks: Race Durra caudatum. Head type 6
   semi-compact, elliptical. Seeds light red. Cultivated.
  Seed.
- PI 559864 donor id: 4541. origin: Yemen. locality: Bany Hoshysh. elevation: 2876m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seeds white. Cultivated. Seed.

- PI 559865 donor id: 4543. origin: Yemen. locality: Wadi Hizyez. elevation: 2386m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seeds white. Cultivated. Seed.
- PI 559866 donor id: 4545. origin: Yemen. locality: Al Asha.
  elevation: 1193m. remarks: Race Durra caudatum. Head
  type 5 semi-compact, ovate. Seeds white. Cultivated.
  Seed.
- PI 559867 donor id: 4546. origin: Yemen. locality: Al Asha.
  elevation: 1193m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base, with usually a
  recurved peduncle. Seeds light red. Cultivated. Seed.
- PI 559868 donor id: 4547. origin: Yemen. locality: Near Huth. elevation: 1930m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seeds white. Cultivated. Seed.
- PI 559869 donor id: 4548. origin: Yemen. locality: Sadah. elevation: 1791m. remarks: Race Durra. Head type 6 semi-compact, elliptical. Seeds light yellow. Cultivated. Seed.
- PI 559870 donor id: 4550. origin: Yemen. locality: Wadi Warwar. elevation: 2486m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seeds white. Cultivated. Seed.
- PI 559871 donor id: 4574. origin: Yemen. locality: Ibb-Daliel Otuma. elevation: 2400m. remarks: Race Durra. Head type 5 semi-compact, ovate. Seeds yellow. Cultivated. Seed.
- PI 559872 donor id: 4583. origin: Yemen. locality: Mafdan. elevation: 2600m. remarks: Race Durra. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Cultivated. Seed.
- PI 559873 donor id: 4584. origin: Yemen. locality: Mafdan. elevation: 3000m. remarks: Race Durra caudatum. Head type 7 very compact, ovate, flattened base, with usually a recurved peduncle. Seeds yellow. Cultivated. Seed.
- PI 559874 origin: Yemen. cultivar: RADAH LOCAL. remarks: Race Durra caudatum. Head type 5 semi-compact, ovate. Seeds yellow. Cultivated. Seed.

PI 559732 to 559875-continued

PI 559875 origin: Yemen. cultivar: SANAA LOCAL. remarks: Race - Durra. Head type 7 - very compact, ovate, flattened base, with usually a recurved peduncle. Seeds white. Cultivated. Seed.

PI 559876. Ceanothus impressus Trel. RHAMNACEAE

Donated by: Carter Seeds, Vista, California, United States. Received January 1991.

origin: United States. source history: Received from Carter Seeds to NCGR-Corvallis Carter Seeds, Vista, California. Perennial. Cultivated. Seed.

PI 559877. Ceanothus integerrimus Hook. & Arn. RHAMNACEAE

**Donated by:** Southwestern Native Seeds, Tucson, Arizona, United States. Received January 30, 1991.

origin: United States. source history: Received from Southwestern Native Seeds to NCGR-Corvallis Southwestern Native Seeds, Tucson, Arizona. Perennial. Cultivated. Seed.

PI 559878. Ceanothus integerrimus Hook. & Arn. RHAMNACEAE

**Donated by:** Carter Seeds, Vista, California, United States. Received December 23, 1991.

origin: United States. source history: Received from Carter Seeds to NCGR-Corvallis Carter Seeds, Vista, California. Perennial. Cultivated. Seed.

PI 559879. Ceanothus velutinus Douglas ex Hook. RHAMNACEAE

Donated by: Berry Botanic Gardens, Portland, Oregon, United States. Received January 03, 1991.

origin: United States. source history: Received from the Berry Botanic Gardens to NCGR-Corvallis Berry Botanic Gardens, Portland, Oregon. pedigree: Collected from the wild in Oregon. local name: Common Buckbrush. locality: East slopes of the Oregon Cascades. latitude: 44 deg. 25 min. N. longitude: 121 deg. 30 min. W. Perennial. Wild. Seed.

PI 559880. Ceanothus velutinus Douglas ex Hook. RHAMNACEAE

Donated by: Hohn, T., Washington Park Arboretum, Seattle, Washington, United States. Received March 05, 1991.

origin: United States. source history: Received from Hohn to NCGR-Corvallis Dr. T. Hohn, Curator, Washington Park Arb., Seattle. pedigree: Collected from the wild in Washington. local name: Common Buckbrush. locality: North Cascades Nat'l Park, Pacific Crest Trail. latitude: 48 deg. N. longitude: 121 deg. W. Perennial. Wild. Seed.

PI 559881 to 559882. Cydonia oblonga Miller ROSACEAE Quince

Donated by: Westwood, M.N., USDA/ARS/NPGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. Received 1991.

PI 559881 origin: United States. source history: Received from M.N. Westwood to NCGR-Corvallis M.N. Westwood, NCGR-Corvallis/Oregon State University. remarks: No additional information provided upon receipt. Perennial. Plant.

PI 559882 origin: United States. source history: Received from collection of M.N. Westwood to NCGR-Corvallis M.N. Westwood, NCGR-Corvallis/Oregon State University. cultivar: Quince W. remarks: No additional information provided. Perennial. Breeding Material. Plant.

PI 559883. Cydonia oblonga Miller ROSACEAE Quince

Donated by: Westwood, M.N., USDA/ARS/NPGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. Received 1991.

origin: United States. origin institute: Oregon State University, Dept. Horticulture, Corvallis, Oregon United States. source history: Received from collection of M.N. Westwood to NCGR-Corvallis M.N. Westwood, NCGR-Corvallis/Oregon State University. cultivar: Reimer. other id: Reimer No. 60. Perennial. Cultivar. Plant.

PI 559884 to 559887. Cydonia oblonga Miller ROSACEAE Quince

Donated by: Westwood, M.N., USDA/ARS/NPGR-Corvallis, 33447 Peoria Road, Corvallis, Oregon, United States. Received March 02, 1991.

## PI 559884 to 559887-continued

- PI 559884 origin: UNCERTAIN. source history: Recieved from Glenn Dale to M.N. Westwood collection to NCGR-Corvallis. Original source not indicated M.N. Westwood, NCGR-Corvallis/Oregon State University. cultivar: BA-29. remarks: No additional information provided upon receipt. Perennial. Breeding Material. Plant.
- PI 559885 origin: United Kingdom. origin institute: East Malling Research Station, Maidstone, Kent, England United Kingdom. source history: Recieved from M.N. Westwood collection to NCGR-Corvallis M.N. Westwood, NCGR-Corvallis/Oregon State University. remarks: No additional information available. Perennial. Breeding Material. Plant.
- PI 559886 origin: France. origin institute: Angers Research
  Station, Maine-et-Loire France. source history:
  Recieved from Lepage (?) to M.N. Westwood collection to
  NCGR-Corvallis M.N. Westwood, NCGR-Corvallis/Oregon State
  University. remarks: Westwood's date of acquisition is
  unknown. Perennial. Breeding Material. Plant.
- PI 559887 origin: United States. origin institute: Oregon State University, Agricultural Research Station, Medford, Oregon United States. source history: Received from Medford to M.N. Westwood collection to NCGR- Corvallis M.N. Westwood, NCGR-Corvallis/Oregon State University. remarks: No additional information provided. Perennial. Breeding Material. Plant.
- PI 559888 to 559890. Cydonia oblonga Miller ROSACEAE Quince
  - Donated by: Kennedy, C.T., California Rare Fruit Growers, Atherton, California, United States. Received January 28, 1991.
  - PI 559888 origin: United States. source history: Received from C.T. Kennedy to NCGR-Corvallis C.T. Kennedy, California Rare Fruit Growers, Atherton, CA. cultivar: Smyrna. remarks: No additional information provided upon receipt. Perennial. Cultivar. Cutting.
  - PI 559889 origin: United States. source history: Received from C.T. Kennedy to NGR-Corvallis C.T. Kennedy, California Rare Fruit Growers, Atherton, CA. cultivar: Orange. remarks: Large, roundish golden yellow fruit with excellent flavor. Perennial. Cultivar. Cutting.

- PI 559890 origin: United States. source history: Received from C.T. Kennedy to NCGR-Corvallis C.T. Kennedy, California Rare Fruit Growers, Atherton, CA. cultivar: Van Deman. remarks: Large, greenish-yellow fruit of good quality. Perennial. Cultivar. Cutting.
- PI 559891. Cydonia oblonga Miller ROSACEAE Quince

**Donated by:** Lanterman, W.S., Saanichton Research and Plant Quarantine, Station, Saanichton, British Columbia, Canada. Received February 28, 1991.

origin: Canada. source history: Scionwood received from Saanichton Res. and Plant Quar. Sta. BC, Canada to NCGR-Corvallis Dr. Lanterman, Sannichton Res and Quar Sta, BC, Canada. cultivar: Quince Kwee Adams. remarks: No additional information provided. Perennial. Cultivar. Cutting.

PI 559892 to 559899. Cydonia oblonga Miller ROSACEAE Quince

Donated by: Howell, W., Washington State University, IRP, Prosser, Washington, United States. Received January 08, 1991.

- PI 559892 origin: United States. source history: Virus-free scions received from IRP, Prosser, WA to NCGR- Corvallis Dr. W. Howell, IRP, Prosser, Washington. cultivar: Pineapple. remarks: Fruit flavor is supposed to resemble a pineapple. Perennial. Cultivar. Cutting.
- PI 559893 origin: United States. source history: Scionwood received from IRP, Prosser, Washington to NCGR- Corvallis Dr. W. Howell, IRP, Prosser, Washington. cultivar: Provence. remarks: Virus free clone from IRP. Perennial. Cultivar. Cutting.
- PI 559894 origin: Poland. origin institute: Research Institute of Pomology, Skierniewice Poland. source history:
  Scionwood received from IRP, Prosser, Washington to NCGR-Corvallis Dr. W. Howell, IRP, Prosser, Washington.
  cultivar: Pigwa No. 1. remarks: Virus free clone from IRP. Perennial. Breeding Material. Cutting.
- PI 559895 origin: Poland. origin institute: Research Institute of Pomology, Skierniewice Poland. source history: Scions received from IRP, Prosser, WA to NCGR-Corvallis Dr. W. Howell, IRP, Prosser, Washington. cultivar: Pigwa No. 2. remarks: Virus-free clone. Perennial. Breeding Material. Cutting.

#### PI 559892 to 559899-continued

- PI 559896 origin: Poland. origin institute: Research Institute of Pomology, Skierniewice Poland. source history: Scionwood received from IRP, Prosser, Washington to NCGR-Corvallis Dr. W. Howell, IRP, Prosser, Washington. cultivar: Pigwa No. 3. remarks: Virus free clone from IRP. Perennial. Breeding Material. Cutting.
- PI 559897 origin: United States. source history: Scionwood received from IRP, Prosser, Washington to NCGR- Corvallis Dr. W. Howell, IRP, Prosser, Washington. cultivar:

  Quince A 4-1-1. remarks: Virus free clone from IRP.
  Perennial. Breeding Material. Cutting.
- PI 559898 origin: United States. source history: Scionwood received from IRP, Prosser, Washington to NCGR- Corvallis Dr. W. Howell, IRP, Prosser, Washington. cultivar:

  Quince C 7/1 6-1. remarks: Virus free clone from IRP.
  Perennial. Breeding Material. Cutting.
- PI 559899 origin: United States. source history: Scionwood received from IRP, Prosser, Washington to NCGR- Corvallis Dr. W. Howell, IRP, Prosser, Washington. cultivar:

  Quince E 5-1-1. remarks: Virus free clone from IRP.

  Perennial. Breeding Material. Cutting.
- PI 559900 to 559904. Cydonia oblonga Miller ROSACEAE Quince

Donated by: Burmistrov, L.A., N.I. Vavilov Institute of Plant Industry, Leningrad, Russian Federation. Received February 02, 1991.

- PI 559900 origin: Russian Federation. origin institute: Volgograd Experiment Station, Volgograd, Russian SFSR Russian Federation. source history: Seedlot received from Burmistrov to NGR-Corvallis Dr. Burmistrov, N.I. Vavilov Institute, Leningrad, USSR. cultivar: Akhtubinskaya. Perennial. Cultivar. Seed.
- PI 559901 origin: Russian Federation. origin institute: Volgograd Experiment Station, Volgograd, Russian SFSR Russian Federation. source history: Seedlot received from Burmistrov to NGR-Corvallis Dr. Burmistrov, N.I. Vavilov Institute, Leningrad, USSR. cultivar: Krukovskaya. Perennial. Cultivar. Seed.
- PI 559902 origin: Russian Federation. origin institute: Volgograd Experiment Station, Volgograd Russian Federation. source history: Seedlot received from Burmistrov to NCGR-Corvallis Dr. Burmistrov, N.I. Vavilov Institute, Leningrad, USSR. cultivar: Maslenka Rannaya. Perennial. Cultivar. Seed.

PI 559900 to 559904-continued

PI 559903 origin: Russian Federation. origin institute: Volgograd Experiment Station, Volgograd Russian Federation. source history: Seedlot received from Burmistrov to NCGR-Corvallis Dr. Burmistrov, N.I. Vavilov Institute, Leningrad, USSR. cultivar: Skorospelka. remarks: Early maturity. Perennial. Cultivar. Seed.

PI 559904 origin: Russian Federation. origin institute: Volgograd Experiment Station, Volgograd Russian Federation. source history: Seedlot received from Burmistrov to NCGR-Corvallis Dr. Burmistrov, N.I. Vavilov Institute, Leningrad, USSR. cultivar: Teplovskaya. Perennial. Cultivar. Seed.

PI 559905. Cydonia oblonga Miller ROSACEAE Quince

Donated by: Tukey, L.D., Pennsylvania State University, University Park, Pennsylvania, United States. Received February 12, 1991.

origin: United States. origin institute: Angers Experiment Station, Maine-et-Loire, Pennsylvania France. source history: Rootstocks received from France to Tukey to NCGR-Corvallis Dr. L.D. Tukey, Pennsylvania State Univ., University Park. cultivar: Sydo. remarks: This cultivar is used as a rootstock. Perennial. Cultivar. Cutting.

PI 559906. Cydonia oblonga Miller ROSACEAE Quince

Donated by: Waterworth, Howard, USDA/ARS/NPGQL, Glenn Dale, Maryland, United States. Received October 19, 1991.

origin: Turkey. origin institute: USDA/ARS, Nat'l Plant Germplasm Quarantine Lab., Glenn Dale, Maryland United States. source history: Seedlot received from Waterworth to NCGR-Corvallis Dr. Howard Waterworth, USDA/ARS NPGQL, Glenn Dale, MD. pedigree: Open pollinated seed from Q 25982. remarks: Parent plant is a large-fruited edible type from Turkey. Perennial. Breeding Material. Seed.

PI 559907. Eragrostis lehmanniana Nees POACEAE Lehmann lovegrass

Donated by: Voigt, P.W., Agricultural Research Service -- USDA, Grassland, Soil, and Water Res. Lab., Temple, Texas 76502, United States; and Texas Agr. Exp. Sta.. remarks: TEM-SD Germplasm. Received January 24, 1991.

## PI 559907-continued

origin: United States. developed: P.W. Voigt, B.L. Burson. origin institute: Agricultural Research Service — USDA, Grassland, Soil, and Water Res. Lab., 808 E. Blackland Rd., Temple, Texas 76502 United States. cultivar: TEM-SD. pedigree: Derived through open pollination from Vorster collections 459, 467 and 469 made in N. Cape Prov., Republic of South Africa. other id: GP-63. group: CSR-OTHER GRASSES. other id: W6 10115. group: W6. restricted: CSR. remarks: Diploid, 20 chromosomes. The only source of this species that is known to reproduce sexually. Weakly stoloniferous. Height 30-40cm. Seed dormancy high. MUST BE INCREASED IN ISOLATION FROM OTHER CLOSELY RELATED SPECIES. Perennial. Breeding Material. Seed.

# PI 559908. Panicum coloratum L. POACEAE Kleingrass

Donated by: Young, B.A., Agricultural Research Service -- USDA, Grassland, Soil and Water Research Lab, Temple, Texas 76502, United States; and Texas Agr. Exp. Sta.. remarks: TEM-LDl Kleingrass Germplasm. Received January 24, 1991.

origin: United States. developed: B.A. Young, C.R. Tischler, W.R. Ocumpaugh. origin institute: Agricultural Research Service -- USDA, Grassland, Soil and Water Res. Lab., Temple, Texas 76502 United States. cultivar: TEM-LD1. pedigree: From population of 75% Selection-75 and 25% OKPC-1 germplasm. Plants from selection cycle 6 for reduced post-harvest seed dormancy were recombined in isolation nursery (polycross). other id: GP-64. group: CSR-OTHER GRASSES. restricted: CSR. remarks: Selected for low post harvest seed dormancy. Germination of freshly-harvested seed 89%. Morphologically indistinguishable from Selection-75, the cultivar which comprised 75% of base population. Produces abundant fertile seed in late spring which have average mass of 0.82mg/seed. Spring growth initiated in early March, plants bloom by mid-May. Yield trials produced 38g of dry matter/plant, similar to Selection-75, but wintersurvival reduced compared to same cultivar. Perennial. Breeding Material. Seed.

## PI 559909. Carthamus tinctorius L. ASTERACEAE Safflower

Donated by: Mundel, H. H., Lethbridge Res. Sta.--Agriculture Canada, P.O. Box 3000 Main, Lethbridge AB TlJ 4Bl, Canada. remarks: AC Stirling Safflower. Received January 24, 1991.

#### PI 559909-continued

origin: Canada. developed: H.-H. Mundel, R.J. Morrison, H.C. Huang, F. Kiehn. origin institute: Lethbridge Res. Sta.--Agriculture Canada, P.O. 3000 Main, Lethbridge AB TlJ 4Bl Canada. cultivar: AC STIRLING. pedigree: TH-5/3/Gila//Mexican Dwarf/RH-4. other id: Lesaf 241. other id: CV-18. group: CSR-SAFFLOWER. other id: W6 10114. group: W6. remarks: Corolla yellow at bloom and post bloom. Maturity (in Canadian prairies) averaged 3.2 days later than Saffire, 5.8 days earlier than S-208. Moderately resistant to head rot (Sclerotinia sclerotiorum). Susceptible to Alternaria leaf blight and rust. Yield averaged 16% above Saffire. Oil averaged 34.7% (range: 29.9-38.6%), compared to 32.2 for Saffire and 37.3 for S-208. Cultivar. Seed.

PI 559910. Gossypium hirsutum L. MALVACEAE Upland cotton

Donated by: Cantrell, R.G., New Mexico Agr. Exp. Sta., New Mexico State University, Las Cruces, New Mexico 88003-0003, United States. remarks: Acala 1517-SR3 Cotton. Received January 24, 1991.

origin: United States. developed: R.G. Cantrell, C.L. Roberts, D.D. Davis, C.E. Barnes, N.R. Malm. origin institute: New Mexico Agr. Exp. Sta., New Mexico State University, Dept. 3Q, P.O. Box 30003, Las Cruces, New Mexico 88003-0003 United States. cultivar: ACALA 1517-SR3. pedigree: Acala 1517-E2 / unknown storm-resistant source. other id: Acala E3134. other id: CV-100. source: Crop Sci. 32(5):1295 1992. group: CSR-COTTON. restricted: CSR. remarks: Upland cotton. Plant shape similar to Acala 1517-SR2. Moderately tolerant to Verticillium wilt (Verticillium dahliae). High quality stripper variety. Fiber span average 2.5%, length 31mm. Fiber strength 230 kN m Kg. Bolls ovate, average 2.3g of lint per boll. Seeds medium, fuzzy seed index 11.5g. Spring Annual. Cultivar. Seed.

PI 559911. Lycopersicon esculentum Miller, nom. cons. SOLANACEAE Tomato

Donated by: Lambeth, V.N., University of Missouri, Dept.of Horticulture, 1-40 Agriculture, Columbia, Missouri 65211, United States. Received January 24, 1991.

#### PI 559911-continued

origin: United States. cultivar: 31-ST-29. pedigree: F7 selection of VFN 8(ca.) / Mo. line 89-3-60-1. remarks: Maturity mid-season. Horticultural type good. Fruit red, average 6oz, globe, uniform apple green. Tolerance to radial and concentric cracking high. Plants indeterminate. Foliage density moderate. Field immunity to Fusarium oxysporum. Spring Annual. Breeding Material. Seed.

PI 559912. Lycopersicon esculentum Miller, nom. cons. SOLANACEAE Tomato

Donated by: Lambeth, V.N., University of Missouri, Dept.of Horticulture, 1-40 Agriculture, Columbia, Missouri 65211, United States. Received January 24, 1991.

origin: United States. cultivar: PINK MOZARK. pedigree: Earliana / Mo. Acc. 160 / Break-O-Day / Bison / Greater Baltimore, selfed to F6 / Hawaii AES #837, selfed to F7. Then pink selection made. remarks: Fruit pink, deep oblate, smooth, equal in size to Rutgers. Ripening uniform (uu). Moderately crack free. Locules five to many. Plants semi-determinate, compact. Foliage cover moderate. Field immunity to Fusarium oxysporium. Maturity midseason. Parent line for hybrids. Spring Annual. Breeding Material. Seed.

PI 559913. Lycopersicon esculentum Miller, nom. cons. SOLANACEAE
Tomato

Donated by: Lambeth, V.N., University of Missouri, Dept.of Horticulture, 1-40 Agriculture, Columbia, Missouri 65211, United States. Received January 24, 1991.

origin: United States. cultivar: P3229. pedigree: Mo. P3229 (F11) / Mo. P858 (F1) / 2 / Fla. 1346 (STEP 1020) / Md. 102 (STEP 1003). remarks: Fruit red, blocky-globe, firm, 5oz. Ripening uniform. Pericarp thick. Gel red. Plants determinate. Foliage density moderate. Breeding line for firmness, crack resistance and processing quality. Spring Annual. Breeding Material. Seed.

PI 559914. Lycopersicon esculentum Miller, nom. cons. SOLANACEAE Tomato

Donated by: Lambeth, V.N., University of Missouri, Dept.of Horticulture, 1-40 Agriculture, Columbia, Missouri 65211, United States. Received January 24, 1991.

### PI 559914-continued

origin: United States. cultivar: 39-ST-31. pedigree: 41-ST-31 (39-ST-31A) / 2 / Mo. 76-6-60-8 / 3 / VFN 8 / 4 / Glamour / 5 / NY 55-542. remarks: Fruit red, globe, average 5oz., apple green. Tolerance to radial and concentric cracking high. Plants indeterminate. Foliage cover adequate. Field immunity to Fusarium oxysporum. Maturity midseason. Breeding line for fruit crack resistance and high canning quality. Spring Annual. Breeding Material. Seed.

PI 559915. Oryza sp. POACEAE Rice

Donated by: Foster, Ken, Nor-Cal Wild Rice, P.O. Box 940, Woodland, California 95695, United States. Received April 26, 1991.

origin: Italy. local name: RISO DA SEME ARBORIO (Rice of seed (type) Arborio). other id: F 890. Annual. Cultivar. Seed.

PI 559916. Zea mays L. subsp. mays POACEAE Corn

Donated by: United Agri Seeds, Inc., United States. Received January 31, 1991.

origin: United States. origin institute: United Agri Seeds, Inc. United States. cultivar: CS405. other id: PVP 9200059. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559917. Zea mays L. subsp. mays POACEAE Corn

**Donated by:** United Agri Seeds, Inc., United States. Received January 31, 1991.

origin: United States. origin institute: United Agri Seeds, Inc. United States. cultivar: MQ305. other id: PVP 9200060. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559918. Zea mays L. subsp. mays POACEAE Corn

**Donated by:** United Agri Seeds, Inc., United States. Received January 31, 1991.

origin: United States. origin institute: United Agri Seeds, Inc. United States. cultivar: NQ508. other id: PVP 9200061. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559919. Zea mays L. subsp. mays POACEAE Corn

Donated by: United Agri Seeds, Inc., United States. Received January 31, 1991.

origin: United States. origin institute: United Agri Seeds, Inc. United States. cultivar: OQ101. other id: PVP 9200062. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559920. Zea mays L. subsp. mays POACEAE Corn

Donated by: United Agri Seeds, Inc., United States. Received January 31, 1991.

origin: United States. origin institute: United Agri Seeds, Inc. United States. cultivar: OQ403. other id: PVP 9200063. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559921. Zea mays L. subsp. mays POACEAE Corn

Donated by: United Agri Seeds, Inc., United States. Received January 31, 1991.

origin: United States. origin institute: United Agri Seeds, Inc. United States. cultivar: OS602. other id: PVP 9200064. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559922. Poa supina Schrad. POACEAE Bluegrass

Donated by: Saatzucht Steinach Gmb H., Germany. Received January 31, 1991.

origin: Germany. origin institute: Saatzucht Steinach Gmb H. Germany. cultivar: SUPRANOVA. other id: PVP 9200065. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559923. Arachis hypogaea L. FABACEAE Peanut

Donated by: Agra Tech Seeds, Inc., United States. Received January 31, 1991.

origin: United States. origin institute: Agra Tech Seeds, Inc. United States. cultivar: 127. other id: PVP 9200066. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559924. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Hartz Seed Company, United States. Received January 31, 1991.

origin: United States. origin institute: Hartz Seed Company United States. cultivar: H5240. other id: PVP 9200067. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559925. Trifolium pratense L. FABACEAE Red clover

Donated by: International Seeds, Inc., United States. Received January 31, 1991.

origin: United States. origin institute: International Seeds, Inc. United States. cultivar: RENEGADE. other id: PVP 9200068. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559926. Phaseolus vulgaris L. FABACEAE Dry bean

**Donated by:** Rogers NK Seed Company, United States. Received January 31, 1991.

origin: United States. origin institute: Rogers NK Seed Company United States. cultivar: FOXFIRE. other id: PVP 9200069. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559927. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Delta and Pine Land Company, United States. Received January 31, 1991.

origin: United States. origin institute: Delta and Pine Land Company United States. cultivar: DP 3627. other id: PVP 9200070. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559928. Triticum aestivum L., nom. cons. POACEAE Common wheat

Donated by: Agri Pro Biosciences, Inc., United States. Received January 31, 1991.

origin: United States. origin institute: Agri Pro Biosciences, Inc., Colorado United States. cultivar: MALLARD. pedigree: Wheeler/Caldwell. other id: PVP 9200071. source: Pending. group: PVPO. patent: PVPO. remarks: Mallard is high yielding, medium maturity and has very strong straw. Milling and baking quality is very good. It is best adapted to the midsouth area of the U.S., primarily from southern Indiana to southern Arkansas and from Missouri to the east coast. It provides excellent protection against stem rust and very good protection against leaf rust, scab, Septoria nodorum, and wheat spindle streak virus. Mallard gives good protection to SBMV, powdery mildew, Septoria tritici, and BYDV. Cultivar. Seed.

PI 559929. Triticum aestivum L., nom. cons. POACEAE Common wheat

Donated by: Agri Pro Biosciences, Inc., United States. Received January 31, 1991.

origin: United States. origin institute: Agri Pro Biosciences, Inc., Berthoud, Colorado United States. cultivar: SAVANNAH. pedigree: VA77-57-53/4/Holley/McNair 2203//Coker 68-15/3/Hunter. other id: PVP 9200072. source: Pending. group: PVPO. patent: PVPO. remarks: Savannah is a very high yielding, strong strawed, short semidwarf variety with midseason maturity and fair winter- hardiness. Milling and baking properties are acceptable. It is well adapted to the Gulf coast of the U.S., and also to the mid south soft wheat regions, including Arkansas and Mississippi. It provides excellent protection against leaf rust, powdery mildew, WSMV, and wheat spindle streak virus. Savannah gives good protection to Septoria nodorum, Xanthomonas bacterial blight, stem and stripe rust. Cultivar. Seed.

PI 559930. Triticum aestivum L., nom. cons. POACEAE Common wheat

Donated by: Agri Pro Biosciences, Inc., United States. Received January 31, 1991.

## PI 559930-continued

origin: United States. origin institute: Agri Pro Biosciences, Inc., Berthoud, Colorado United States. cultivar: SAWYER. pedigree:
Timwin/Monon//Fredrick/Oasis. other id: PVP 9200073.
source: Pending. group: PVPO. patent: PVPO. remarks:
Sawyer is a medium height variety that is high yielding, early maturing, and strong strawed. Milling quality is very good and baking quality is good. It's area of adaptation is very broad, covering the area from eastern Kansas to Wisconsin to the east coast, then from North Carolina back to Arkansas and to east Kansas. It provides excellent protection against wheat spindle streak virus and stem rust, very good protection against powdery mildew, Septoria nodorum, Rhizoctonia, and SBMV. Good protection is provided against BYDV, wheat streak virus, S. tritici, scab. Cultivar. Seed.

PI 559931. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Maryland Agr. Exp. Sta., Maryland, United States. Received January 31, 1991.

origin: United States. origin institute: Maryland Agr. Exp. Sta., Maryland United States. cultivar: Corsica. other id: PVP 9200074. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559932. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Maryland Agr. Exp. Sta., Maryland, United States. Received January 31, 1991.

origin: United States. origin institute: Maryland Agr. Exp. Sta., Maryland United States. cultivar: Manokin. other id: PVP 9200075. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559933. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Kansas Agr. Exp. Sta., Kansas, United States. Received January 31, 1991.

origin: United States. origin institute: Kansas Agr. Exp. Sta., Kansas United States. cultivar: KS4390. other id: PVP 9200076. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559934. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Kansas Agr. Exp. Sta., Kansas, United States. Received January 31, 1991.

origin: United States. origin institute: Kansas Agr. Exp. Sta., Kansas United States. cultivar: KS5292. other id: PVP 9200077. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559935. Zea mays L. subsp. mays POACEAE Field corn

Donated by: Pioneer Hi-Bred International, Inc., United States. Received February 06, 1991.

origin: United States. origin institute: Pioneer Hi-Bred International, Inc. United States. cultivar: PHBA6. other id: PVP 9200078. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559936. Zea mays L. subsp. mays POACEAE Field corn

Donated by: Pioneer Hi-Bred International, Inc., United States. Received February 06, 1991.

origin: United States. origin institute: Pioneer Hi-Bred International, Inc. United States. cultivar: PHBW8. other id: PVP 9200079. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559937. Zea mays L. subsp. mays POACEAE Field corn

Donated by: Pioneer Hi-Bred International, Inc., United States. Received February 06, 1991.

origin: United States. origin institute: Pioneer Hi-Bred International, Inc. United States. cultivar: PHDD6. other id: PVP 9200080. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559938. Zea mays L. subsp. mays POACEAE Field corn

Donated by: Pioneer Hi-Bred International, Inc., United States. Received February 06, 1991.

origin: United States. origin institute: Pioneer Hi-Bred International, Inc. United States. cultivar: PHGG7. other id: PVP 9200081. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559939. Zea mays L. subsp. mays POACEAE Field corn

Donated by: Pioneer Hi-Bred International, Inc., United States. Received February 06, 1991.

origin: United States. origin institute: Pioneer Hi-Bred International, Inc. United States. cultivar: PHGV6. other id: PVP 9200082. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559940. Zea mays L. subsp. mays POACEAE Field corn

Donated by: Pioneer Hi-Bred International, Inc., United States. Received February 06, 1991.

origin: United States. origin institute: Pioneer Hi-Bred International, Inc. United States. cultivar: PHGW7. other id: PVP 9200083. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559941. Zea mays L. subsp. mays POACEAE Field corn

Donated by: Pioneer Hi-Bred International, Inc., United States. Received February 06, 1991.

origin: United States. origin institute: Pioneer Hi-Bred International, Inc. United States. cultivar: PHHV4. other id: PVP 9200084. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559942. Zea mays L. subsp. mays POACEAE Field corn

Donated by: Pioneer Hi-Bred International, Inc., United States. Received February 06, 1991.

origin: United States. origin institute: Pioneer Hi-Bred International, Inc. United States. cultivar: PHK74. other id: PVP 9200085. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559943. Zea mays L. subsp. mays POACEAE Field corn

Donated by: Pioneer Hi-Bred International, Inc., United States. Received February 06, 1991.

origin: United States. origin institute: Pioneer Hi-Bred International, Inc. United States. cultivar: PHN18. other id: PVP 9200086. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559944. Zea mays L. subsp. mays POACEAE Field corn

Donated by: Pioneer Hi-Bred International, Inc., United States. Received February 06, 1991.

origin: United States. origin institute: Pioneer Hi-Bred International, Inc. United States. cultivar: PHP85. other id: PVP 9200087. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559945. Zea mays L. subsp. mays POACEAE Field corn

Donated by: Pioneer Hi-Bred International, Inc., United States. Received February 06, 1991.

origin: United States. origin institute: Pioneer Hi-Bred International, Inc. United States. cultivar: PHPR5. other id: PVP 9200088. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559946. Zea mays L. subsp. mays POACEAE Field corn

Donated by: Pioneer Hi-Bred International, Inc., United States. Received February 06, 1991.

origin: United States. origin institute: Pioneer Hi-Bred International, Inc. United States. cultivar: PHR30. other id: PVP 9200089. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559947. Zea mays L. subsp. mays POACEAE Field corn

Donated by: Pioneer Hi-Bred International, Inc., United States. Received February 06, 1991.

origin: United States. origin institute: Pioneer Hi-Bred International, Inc. United States. cultivar: PHR31. other id: PVP 9200090. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559948. Zea mays L. subsp. mays POACEAE Field corn

Donated by: Pioneer Hi-Bred International, Inc., United States. Received February 06, 1991.

origin: United States. origin institute: Pioneer Hi-Bred International, Inc. United States. cultivar: PHT47. other id: PVP 9200091. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559949. Zea mays L. subsp. mays POACEAE Field corn

Donated by: Pioneer Hi-Bred International, Inc., United States. Received February 06, 1991.

origin: United States. origin institute: Pioneer Hi-Bred International, Inc. United States. cultivar: PHT69. other id: PVP 9200092. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559950. Zea mays L. subsp. mays POACEAE Field corn

Donated by: Pioneer Hi-Bred International, Inc., United States. Received February 06, 1991.

origin: United States. origin institute: Pioneer Hi-Bred International, Inc. United States. cultivar: PHT73. other id: PVP 9200093. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559951. Zea mays L. subsp. mays POACEAE Field corn

Donated by: Pioneer Hi-Bred International, Inc., United States. Received February 06, 1991.

origin: United States. origin institute: Pioneer Hi-Bred International, Inc. United States. cultivar: PHTM9. other id: PVP 9200094. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559952. Zea mays L. subsp. mays POACEAE Field corn

Donated by: Pioneer Hi-Bred International, Inc., United States. Received February 06, 1991.

origin: United States. origin institute: Pioneer Hi-Bred International, Inc. United States. cultivar: PHV53. other id: PVP 9200095. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559953. Zea mays L. subsp. mays POACEAE Field corn

Donated by: Pioneer Hi-Bred International, Inc., United States. Received February 06, 1991.

origin: United States. origin institute: Pioneer Hi-Bred International, Inc. United States. cultivar: PHVA9. other id: PVP 9200096. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559954. Zea mays L. subsp. mays POACEAE Field corn

Donated by: Pioneer Hi-Bred International, Inc., United States. Received February 06, 1991.

origin: United States. origin institute: Pioneer Hi-Bred International, Inc. United States. cultivar: PHWG5. other id: PVP 9200097. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559955. Phlox drummondii Hook. POLEMONIACEAE Annual phlox

Donated by: Zaadunie B.V., Netherlands. Received February 06, 1991.

origin: Netherlands. origin institute: Zaadunie B.V. Netherlands. cultivar: PALONA VIOLET WITH EYE. other id: PVP 9200098. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559956. Pisum sativum L. FABACEAE Pea

**Donated by:** Asgrow Seed Company, United States. Received February 06, 1991.

origin: United States. origin institute: Asgrow Seed Company United States. cultivar: XP C268. other id: PVP 9200099. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559957. Pisum sativum L. FABACEAE Pea

**Donated by:** Asgrow Seed Company, United States. Received February 06, 1991.

origin: United States. origin institute: Asgrow Seed Company United States. cultivar: XP F237. other id: PVP 9200100. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559958. Pisum sativum L. FABACEAE Pea

**Donated by:** Asgrow Seed Company, United States. Received February 06, 1991.

origin: United States. origin institute: Asgrow Seed Company United States. cultivar: ARISE. other id: PVP 9200101. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559959. Pisum sativum L. FABACEAE Pea

**Donated by:** Asgrow Seed Company, United States. Received February 06, 1991.

origin: United States. origin institute: Asgrow Seed
Company United States. cultivar: ENCORE. other id: PVP
9200102. source: Certificate in force. group: PVPO.
patent: PVPO. Cultivar. Seed.

PI 559960. Pisum sativum L. FABACEAE Pea

**Donated by:** Asgrow Seed Company, United States. Received February 06, 1991.

origin: United States. origin institute: Asgrow Seed Company United States. cultivar: FILLY. other id: PVP 9200103. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559961. Pisum sativum L. FABACEAE Pea

**Donated by:** Asgrow Seed Company, United States. Received February 06, 1991.

origin: United States. origin institute: Asgrow Seed Company United States. cultivar: LASER. other id: PVP 9200104. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 559962 to 559968. Triticum aestivum L., nom. cons. POACEAE Common wheat

Donated by: Bockelman, H.E., USDA-ARS, Small Grains Germplasm Research Facility, P.O. Box 307, Aberdeen, Idaho 83210, United States. Received September 01, 1991.

- PI 559962 donor id: No. 56. origin: Ethiopia. source history:
  Separation of species from PI 59284 (CI 8155)..
  collected: February 1924. collector: H.L. Shantz, USDA,
  Bureau of Plant Industry. collector id: No. 56.
  Landrace. Seed.
- PI 559963 origin: Turkey. source history: Separation of species from PI 166660.. local name: Sert. collected: 1948. collector: V. Taysi, Yuksek Ziraat Enstitusu, Ankara J.R. Harlan, USDA, Bureau of Plant Industry. collector id: No. 1073. other id: No. 256/1. locality: Karabiga. Landrace. Seed.

- PI 559964 origin: Turkey. source history: Separation of species from PI 166692.. local name: Karakilcik. collected: 1948. collector: V. Taysi, Yuksek Ziraat Enstitusu, Ankara J.R. Harlan, USDA, Bureau of Plant Industry. collector id: No. 1105. other id: No. 28c. Landrace. Seed.
- PI 559965 origin: Turkey. source history: Separation of species from PI 166715.. local name: Sert. collected: 1948. collector: V. Taysi, Yuksek Ziraat Enstitusu, Ankara J.R. Harlan, USDA, Bureau of Plant Industry. collector id: No. 1128. other id: No. 216/3. Landrace. Seed.
- PI 559966 origin: Turkey. source history: Separation of species from PI 264966.. collected: 1956. collector: D.E. Symon, Adelaide University, Australia. collector id: No. 1/7. Landrace. Seed.
- PI 559967 origin: Morocco. source history: Separation of species from PI 525354.. collected: May 1985. collector: L. Guarino. collector id: No. 1116. locality: 15 km west of Sidi Bennour. latitude: 32 deg. N. longitude: 9 deg. W. elevation: 100m. Landrace. Seed.
- PI 559968 origin: Morocco. source history: Separation of species from PI 525445.. collected: July 1985. collector: L. Guarino. collector id: No. 1330. locality: Large flat shallow valley, Almis. latitude: 33 deg. N. longitude: 4 deg. W. elevation: 1700m. Landrace. Seed.
- PI 559969 to 559975. Triticum durum Desf. POACEAE Durum wheat

Donated by: Bockelman, H.E., USDA-ARS, Small Grains Germplasm Research Facility, P.O. Box 307, Aberdeen, Idaho 83210, United States. Received September 01, 1991.

- PI 559969 origin: Ethiopia. source history: Seperation of species from PI 58791 (CI 7840).. collected: November 1923. collector: H.V. Harlan, USDA, Bureau of Plant Industry. collector id: No. 348. locality: market in Addis Ababa. L ndrace. Seed.
- PI 559970 origin: Ethiopia. source history: Separation of species from PI 59284 (CI 8155).. collected: February 1924. collector: H.L. Shantz, USDA, Bureau of Plant Industry. collector id: No. 56. Landrace. Seed.
- PI 559971 origin: Tunisia. source history: Separation of species from CItr 15448.. collector: Hedi Ben Mohamed Ben Ali. collector id: S71-359. locality: Blidet. Landrace. Seed.

#### PI 559969 to 559975-continued

- PI 559972 origin: Turkey. source history: Separation of species from PI 166561.. local name: Koca. collected: 1948. collector: V. Taysi, Yuksek Ziraat Enstitusu, Ankara J.R. Harlan, USDA, Bureau of Plant Industry. collector id: No. 974. other id: No. 53/1A. locality: Cal. Landrace. Seed.
- PI 559973 origin: Egypt. source history: Separation of species from PI 532003.. collected: 1979. collector: F.H. Abdalla, University of Assiut. collector id: No. 2751. remarks: Tolerant to alkali soils. Salt tolerant. Landrace. Seed.
- PI 559974 origin: Egypt. source history: Separation of species from PI 532103.. collected: 1979. collector: F.H.

  Abdalla, University of Assiut. collector id: No. 2046.
  locality: Toekh-Kalubia. remarks: Resistant to powdery mildew and leaf rust. Landrace. Seed.
- PI 559975 origin: Egypt. source history: Separation of species from PI 532138.. collected: 1979. collector: F.H. Abdalla, University of Assiut. collector id: No. 2786. remarks: High protein content. Resistant to powdery mildew. Landrace. Seed.
- PI 559976. Triticum turanicum Jakubz. POACEAE Oriental wheat

Donated by: Bockelman, H.E., USDA-ARS, Small Grains Germplasm Research Facility, P.O. Box 307, Aberdeen, Idaho 83210, United States. Received September 01, 1991.

origin: Morocco. source history: Separation of species from PI 525354.. collected: May 1985. collector: L. Guarino. collector id: No. 1116. locality: 15 km west of Sidi Bennour. latitude: 32 deg. N. longitude: 9 deg. W. elevation: 100m. Landrace. Seed.

PI 559977. Triticum turgidum L. POACEAE

Donated by: Bockelman, H.E., USDA-ARS, Small Grains Germplasm Research Facility, P.O. Box 307, Aberdeen, Idaho 83210, United States. Received September 01, 1991.

origin: Ethiopia. source history: Separation of species from PI 273993. collector: J.R. Harlan, USDA, Bureau of Plant Industry. collector id: No. 1939. locality: field; 5 mi. south of Addis Ababa. Landrace. Seed.

PI 559978. Secale cereale L. subsp. cereale POACEAE

Donated by: Georgia Agr. Exp. Sta., Georgia, United States. Received 1991.

origin: United States. cultivar: HAZEL. remarks: Hazel type produced from Gator rye by recurrent selection for larger seed size. Good resistance to leaf rust. Strong straw and high yielding qualities for both forage and grain. Not yet commercially grown. Seed.

PI 559979. Secale cereale L. subsp. cereale POACEAE

Donated by: Agricultural Research Service -- USDA, Beltsville, Maryland 20705, United States. Received 1991.

origin: United States. cultivar: PROLIFIC SPRING. Seed.

PI 559980. Secale cereale L. subsp. cereale POACEAE

Donated by: Wisconsin Agr. Exp. Sta., University of Wisconsin, Madison, Wisconsin, United States. Received 1991.

origin: United States. cultivar: COLOMA. remarks:
Parentage consists of five selfed plants from a openpollinated isolated population, after a multiple cross of
16 inbred lines. White or amber kernel winter rye.
Adequate resistance to several rye diseases, good winter
hardiness, and improved straw strength. Seed.

PI 559981. Secale cereale L. subsp. cereale POACEAE

Donated by: Minnesota Agr. Exp. Sta., University of Minnesota, St. Paul, Minnesota, United States. Received 1991.

origin: United States. cultivar: RYMIN/MN 11. remarks: Minn. Agr. Exp. Sta. Misc. 24, "Varietal Trials of Farm Crops" probable publishing date Dec. 1973. Seed.

PI 559982 to 559986. Secale cereale L. subsp. cereale POACEAE

Donated by: Morley, D.D., Georgia Coastal Exp. Station, Tifton, Georgia 31794, United States. Received 1991.

PI 559982 origin: Bulgaria. cultivar: KUNG 2. remarks: Background information unavailable. Seed.

PI 559983 origin: Bulgaria. cultivar: PAKURO. remarks: Background information unavailable. Seed.

- PI 559982 to 559986-continued
  - PI 559984 origin: Bulgaria. cultivar: SOFIA 59. remarks: Background information unavailable. Seed.
  - PI 559985 origin: Finland. cultivar: CITTA. remarks: Background information unavailable. Seed.
  - PI 559986 origin: USSR. cultivar: EM-1 (VYATKA X KUNGS II).
    remarks: EM-1 rye is valuable breeding stock as a
    dominant dwarf. Em-1 rye was found as a result of
    inbreeding of the progenies derived from crossing Vyatka
    X Kungs II Kobylyanskii, V.D. 1972. On the genetics of
    the dominant factor for short stem in rye. Translated
    from (Russian) Genetika, Vol. 8, No. 2, pp 12-17. Seed.
- PI 559987. Capsicum annuum L. SOLANACEAE Sweet pepper

Donated by: Badra, T., FAO, National Horticultural Res. Inst., P.M.B. 5432, Ibadan, Oyo, Nigeria. Received April 19, 1991.

donor id: TB82/1011. origin: Nigeria. other id: Grif
465. locality: Ojoo. remarks: Plant height 19cm.
Moderately branching. Stem type intermediate. Foliage
cover medium. Cultivated. Seed.

- PI 559988 to 559991. Capsicum frutescens L. SOLANACEAE
  - Donated by: Badra, T., FAO, National Horticultural Res. Inst., P.M.B. 5432, Ibadan, Oyo, Nigeria. Received April 19, 1991.
  - PI 559988 donor id: TB81/713. origin: Nigeria. other id: Grif 469. locality: Ibbi. remarks: Plant height 7cm. Single stem, flexible. Foliage cover medium. Cultivated. Seed.
  - PI 559989 donor id: TB82/1113. origin: Nigeria. other id: Grif 466. locality: Ikire. remarks: Plant height 28cm.

    Moderately branching. Stem type intermediate. Foliage cover medium. Cultivated. Seed.
  - PI 559990 donor id: TB82/1122. origin: Nigeria. other id: Grif 467. locality: Ikire. remarks: Plant height 22cm.

    Moderately branching. Stem type intermediate. Foliage cover abundant. Cultivated. Seed.
  - PI 559991 donor id: TB82/1280. origin: Nigeria. other id: Grif 468. locality: Iperu. remarks: Plant height 16cm. Heavily branching. Stem type flexible. Foliage cover abundant. Cultivated. Seed.

- PI 559992 to 560026. Citrullus colocynthis (L.) Schrad. CUCURBITACEAE Colocynth
  - Donated by: Badra, T., FAO, National Horticultural Res. Inst., P.M.B. 5432, Ibadan, Oyo, Nigeria. Received April 19, 1991.
  - \* PI 559992 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2466. origin: Nigeria. local name: Egusi. collected: November 08, 1984. other id: Grif 431. locality: Abeokuta. latitude: 07 deg. 10 min. N. longitude: 003 deg. 21 min. E. Wild. Seed.
  - \* PI 559993 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2467. origin: Nigeria. local name: Egusi. collected: November 08, 1984. other id: Grif 432. locality: Abeokuta. latitude: 07 deg. 10 min. N. longitude: 003 deg. 21 min. E. Wild. Seed.
  - \* PI 559994 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2496. origin: Nigeria. local name: Egusi. collected: November 10, 1984. other id: Grif 433. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. Wild. Seed.
  - \* PI 559995 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2497. origin: Nigeria. local name: Egusi. collected: November 10, 1984. other id: Grif 434. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. Wild. Seed.
- \* PI 559996 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2498. origin: Nigeria. local name: Egusi. collected: November 10, 1984. other id: Grif 435. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. Wild. Seed.
- \* PI 559997 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2499. origin: Nigeria. local name: Egusi. collected: November 10, 1984. other id: Grif 436. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. Wild. Seed.
- \* PI 559998 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2500. origin: Nigeria. local name: Egusi. collected: November 10, 1984. other id: Grif 437. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. Wild. Seed.
- \* PI 559999 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2501. origin: Nigeria. local name: Egusi. collected: November 10, 1984. other id: Grif 438. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. Wild. Seed.

- \* PI 560000 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2502. origin: Nigeria. local name: Egusi. collected: November 10, 1984. other id: Grif 439. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. Wild. Seed.
- \* PI 560001 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2503. origin: Nigeria. local name: Egusi. collected: November 10, 1984. other id: Grif 440. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. Wild. Seed.
- \* PI 560002 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2504. origin: Nigeria. local name: Egusi. collected: November 10, 1984. other id: Grif 441. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. Wild. Seed.
- \* PI 560003 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2505. origin: Nigeria. local name: Egusi. collected: November 10, 1984. other id: Grif 442. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. Wild. Seed.
- \* PI 560004 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2506. origin: Nigeria. local name: Egusi. collected: November 10, 1984. other id: Grif 844. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. Wild. Seed.
- \* PI 560005 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2507. origin: Nigeria. local name: Egusi. collected: November 10, 1984. other id: Grif 443. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. Wild. Seed.
- \* PI 560006 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2508. origin: Nigeria. local name: Egusi. collected: November 10, 1984. other id: Grif 444. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. Wild. Seed.
- \* PI 560007 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2509. origin: Nigeria. local name: Egusi. collected: November 10, 1984. other id: Grif 445. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. Wild. Seed.

- \* PI 560008 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2510. origin: Nigeria. local name: Egusi. collected: November 10, 1984. other id: Grif 446. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. Wild. Seed.
- \* PI 560009 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2511. origin: Nigeria. local name: Egusi. collected: November 10, 1984. other id: Grif 447. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. Wild. Seed.
- \* PI 560010 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2563. origin: Nigeria. local name: Egusi. collected: November 15, 1984. other id: Grif 448. locality: Olodo. latitude: 07 deg. 09 min. N. longitude: 003 deg. 40 min. E. remarks: Seed large, yellow, oval and obovate. Margin thick, regular, light yellow, dark edge. Wild. Seed.
- \* PI 560011 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2564. origin: Nigeria. local name: Egusi. collected: November 15, 1984. other id: Grif 449. locality: Olodo. latitude: 07 deg. 09 min. N. longitude: 003 deg. 40 min. E. remarks: Seed large, yellow, oval. Margin thick, irregular, light yellow, dark edge. Wild. Seed.
- \* PI 560012 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2566. origin: Nigeria. local name: Egusi. collected: November 15, 1984. other id: Grif 450. locality: Olodo. latitude: 07 deg. 09 min. N. longitude: 003 deg. 40 min. E. remarks: Seed large, yellow, oval. Margin thick, regular, dark edge. Wild. Seed.
- \* PI 560013 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2567. origin: Nigeria. local name: Egusi. collected: November 15, 1984. other id: Grif 451. locality: Olodo. latitude: 07 deg. 09 min. N. longitude: 003 deg. 40 min. E. remarks: Seed large, yellow. Margin thick, regular, dark edge. Wild. Seed.
- \* PI 560014 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2568. origin: Nigeria. local name: Egusi. collected: November 15, 1984. other id: Grif 452. locality: Olodo. latitude: 07 deg. 09 min. N. longitude: 003 deg. 40 min. E. remarks: Seed large, yellow, obovate. Margin thick, regular, yellowish, dark edge. Wild. Seed.

- \* PI 560015 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2611. origin: Nigeria. local name: Egusi. collected: November 17, 1984. other id: Grif 453. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: Seed large, yellow, elliptical. Margin thin, irregular, yellow. Wild. Seed.
- \* PI 560016 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2612. origin: Nigeria. local name: Egusi. collected: November 17, 1984. other id: Grif 454. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: Seed large, yellow, oval. Margin thin, regular, yellow. Wild. Seed.
- \* PI 560017 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2614. origin: Nigeria. local name: Egusi. collected: November 17, 1984. other id: Grif 455. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: Seed large, yellow, oval. Margin thick, regular, yellowish, dark edge. Wild. Seed.
- \* PI 560018 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2616. origin: Nigeria. local name: Egusi. collected: November 17, 1984. other id: Grif 456. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: Seed large, yellow, oval and obovate. Margin thick, regular, dark edge. Wild. Seed.
- \* PI 560019 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2618. origin: Nigeria. local name: Egusi. collected: November 17, 1984. other id: Grif 457. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: Seed large, yellow, obovate. Margin thick, regular, yellow. Wild. Seed.
- \* PI 560020 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: TB84/2619. origin: Nigeria. local name: Egusi. collected: November 17, 1984. other id: Grif 458. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: Seed large, cream. Margin distinct cream. Wild. Seed.

- \* PI 560021 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: NH84/256. origin: Nigeria. local name: Egusi. collected: August 17, 1984. other id: Grif 459. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: V3-2 (Green). Fruit small, round, light green. Fruit length 20cm, width 39cm, weight 900g, diameter 12.5cm. Skin thick 0.5cm. Fruit flesh white. Seed size medium, length 17mm, width 10mm. Coat yellow. Margin absent. Wild. Seed.
- \* PI 560022 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: NH84/257. origin: Nigeria. local name: Egusi. collected: August 17, 1984. other id: Grif 460. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: V3-2 (white). Fruit small, round, light greenish. Fruit length 20.5cm, width 39cm, weight 800g, diameter 12cm. Skin thick 0.3cm. Fruit flesh white. Seed size medium, length 16mm, width 11mm. Coat yellow. Wild. Seed.
- \* PI 560023 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: NH84/259. origin: Nigeria. local name: Egusi. collected: August 17, 1984. other id: Grif 461. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: TcL 39 (Green). Fruit small, round, light green. Fruit length 19.5cm, width 37cm, weight 760g, diameter 11.5cm. Skin thick 0.4cm. Fruit flesh white. Seed size large, length 18mm, width 11mm, thick, irregular. Coat yellow. Margin black. Wild. Seed.
- \* PI 560024 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: NH84/260. origin: Nigeria. local name: Egusi. collected: August 17, 1984. other id: Grif 462. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: Y1-1 (Green). Fruit small, round, light green. Fruit length 19.5cm, width 39cm, weight 880g, diameter 12cm. Skin thick 0.4cm. Fruit flesh white. Seed size medium, length 16mm, width 10mm, thin, uniform. Coat yellow. Margin black. Wild. Seed.
- \* PI 560025 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: NH84/262. origin: Nigeria. local name: Egusi. collected: August 17, 1984. other id: Grif 463. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: V3-5 (White). Fruit small, round, light yellow. Fruit length 16cm, width 32cm, weight 460g, diameter 10cm. Skin thick 0.4cm. Fruit flesh white. Seed size medium, length 17mm, width 12mm. Coat yellow. Margin absent. Wild. Seed.

- \* PI 560026 Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE donor id: NH84/468. origin: Nigeria. local name: Egusi. collected: August 21, 1984. other id: Grif 464. locality: Ilaro, Egbado Division. latitude: 07 deg. 11 min. N. longitude: 003 deg. 22 min. E. Wild. Seed.
- PI 560027 to 560049. Corchorus olitorius L. TILIACEAE
  - Donated by: Badra, T., FAO, National Horticultural Res. Inst., P.M.B. 5432, Ibadan, Oyo, Nigeria. Received April 19, 1991.
  - PI 560027 donor id: NH84/480. origin: Nigeria. collected: September 06, 1984. other id: Grif 470. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: NHCo3. Wild. Seed.
  - PI 560028 donor id: NH84/481. origin: Nigeria. collected: September 06, 1984. other id: Grif 471. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: NHCo4. Wild. Seed.
  - PI 560029 donor id: NH84/482. origin: Nigeria. collected: September 06, 1984. other id: Grif 472. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: NHCo6. Wild. Seed.
  - PI 560030 donor id: NH84/483. origin: Nigeria. collected: September 06, 1984. other id: Grif 473. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: NHCo8. Wild. Seed.
  - PI 560031 donor id: NH84/484. origin: Nigeria. collected: September 06, 1984. other id: Grif 474. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: NHCo8 (1-13). Wild. Seed.
  - PI 560032 donor id: NH84/485. origin: Nigeria. collected: September 06, 1984. other id: Grif 475. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: NHCo5 DB3. Wild. Seed.
  - PI 560033 donor id: NH84/486. origin: Nigeria. collected: September 06, 1984. other id: Grif 476. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: NHColl. Wild. Seed.
  - PI 560034 donor id: NH84/487. origin: Nigeria. collected: September 06, 1984. other id: Grif 477. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: NHCol2. Wild. Seed.

- PI 560035 donor id: NH84/488. origin: Nigeria. collected: September 06, 1984. other id: Grif 478. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: NHCol3. Wild. Seed.
- PI 560036 donor id: NH84/489. origin: Nigeria. collected: September 06, 1984. other id: Grif 479. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: NHCol4. Wild. Seed.
- PI 560037 donor id: NH84/490. origin: Nigeria. collected:
  September 06, 1984. other id: Grif 480. locality:
  Ibadan. latitude: 07 deg. 22 min. N. longitude: 003
  deg. 51 min. E. remarks: NHCol5. Wild. Seed.
- PI 560038 donor id: NH84/492. origin: Nigeria. collected: September 06, 1984. other id: Grif 481. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: NHCo77. Wild. Seed.
- PI 560039 donor id: TB84/2464. origin: Nigeria. collected:
  November 08, 1984. other id: Grif 482. locality:
  Abeokuta. latitude: 07 deg. 10 min. N. longitude: 003
  deg. 21 min. E. Wild. Seed.
- PI 560040 donor id: TB84/2465. origin: Nigeria. collected:
  November 08, 1984. other id: Grif 483. locality:
  Abeokuta. latitude: 07 deg. 10 min. N. longitude: 003
  deg. 21 min. E. Wild. Seed.
- PI 560041 donor id: TB84/2657. origin: Nigeria. collected:
  November 08, 1984. other id: Grif 484. locality:
  Abeokuta. latitude: 07 deg. 10 min. N. longitude: 003
  deg. 21 min. E. remarks: Oniyaya type. Seed small,
  black. Shape irregular. Wild. Seed.
- PI 560042 donor id: TB84/2658. origin: Nigeria. collected:
  November 08, 1984. other id: Grif 485. locality:
  Abeokuta. latitude: 07 deg. 10 min. N. longitude: 003
  deg. 21 min. E. remarks: Eti Eku type. Seed small, pale
  black. Shape irregular. Wild. Seed.
- PI 560043 donor id: TB85/2714. origin: Nigeria. other id: Grif 486. Seed.
- PI 560044 donor id: TB85/2760. origin: Nigeria. other id: Grif 487. Seed.
- PI 560045 donor id: NH84/491. origin: Nigeria. collected:
  September 06, 1984. other id: Grif 488. locality:
  Ibadan. latitude: 07 deg. 22 min. N. longitude: 003
  deg. 51 min. E. remarks: NHCol7. Wild. Seed.

## PI 560027 to 560049-continued

- PI 560046 donor id: NH84/476. origin: Nigeria. collected: September 06, 1984. other id: Grif 489. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: NHCol. Wild. Seed.
- PI 560047 donor id: NH84/477. origin: Nigeria. collected: September 06, 1984. other id: Grif 490. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: NHCo2. Wild. Seed.
- PI 560048 donor id: NH84/478. origin: Nigeria. collected:
  September 06, 1984. other id: Grif 491. locality:
  Ibadan. latitude: 07 deg. 22 min. N. longitude: 003
  deg. 51 min. E. remarks: NHCo3 wt. Wild. Seed.
- PI 560049 donor id: NH84/479. origin: Nigeria. collected: September 06, 1984. other id: Grif 492. locality: Ibadan. latitude: 07 deg. 22 min. N. longitude: 003 deg. 51 min. E. remarks: NHCo4 (2-c). Wild. Seed.
- PI 560050. Phaseolus vulgaris L. FABACEAE

Donated by: Lister, R. M., Purdue University, West Lafayette, Indiana, United States. Received 1991.

origin: UNKNOWN. cultivar: BLACK TURTLE. Seed.

PI 560051. Phaseolus vulgaris L. FABACEAE

Donated by: Hampton, R. O., Oregon State University, Corvallis, Oregon, United States. Received 1991.

origin: UNKNOWN. cultivar: BLACK TURTLE SOUP. Seed.

PI 560052. Phaseolus vulgaris L. FABACEAE

Donated by: Meiners, J.P., USDA-SEA-AR, Applied Plant Path. Lab, Rm 201 Bldg 004 BARC-West, Beltsville, Maryland 20705, United States. Received 1991.

origin: UNKNOWN. cultivar: STRINGLESS GREEN REFUGEE BEAN. other id: W6 9453. group: W6. Seed.

PI 560053. Hordeum vulgare L. subsp. vulgare POACEAE Barley

Donated by: Ramage, R.T., USDA-ARS, University of Arizona, Tucson, Arizona, United States. Received February 24, 1991.

origin: United States. developed: R.T. Ramage. origin institute: USDA-ARS/Arizona Agric. Exp. Station, Tucson, Arizona United States. cultivar: AZHUL. pedigree: Induced with diethyl sulfate in line 76-19-7. Line 76-19-7 is from F5 cross CC XXXII / Arimont 2X Westbar. other id: Arizona Hull-less. other id: Breeders Line 76-19-7wx. remarks: Spring barley, naked, six-rowed, rough-awned, waxy starch. Growth early, erect. Plant midseason, short. Spikes dense, erect, midlong. Glumes about two-thirds the length of the kernel. Glume awnes about equal the length of the glumes. Kernels naked, white and midlong with short rachilla hairs. Kernel weight about 45-50mg. Being released as source of Betaglucans, has about twice (10-11%) as much as commercial cultivars. Adapted to being grown under irrigation in SW U.S. Has higher frequency of outcrossing, will require greater isolation distances during seed multiplication. Cultivar. Seed.

## PI 560054. Solanum tabanoense Correll SOLANACEAE

Donated by: Spooner, D.M., USDA-ARS, University of Wisconsin, Dept. of Hort., 1575 Linden Drive, Madison, Wisconsin 53703, United States. Received January 30, 1991.

donor id: 5082. origin: Ecuador. collected: May 16, 1991. collector: D.M. Spooner, R. Castillo, L. Lopez. collector id: 5082. other id: Grif 1170. locality: Approx. 1 km S of end of new stone road to Runtun, which ends 12.0km from main E-W road through Banos. latitude: 01 deg. 26 min. S. longitude: 078 deg. 25 min. W. elevation: 2700m. remarks: Growing intertwined among bushes and hard to see. Fruits light green with darker green stripes, looking just like a cultivated pepino (Solanum muricatum). Wild. Seed.

PI 560055 to 560060. Pisum sativum subsp. elatius (Steven ex M. Bieb.)
Asch. & Graebner FABACEAE Wildpea

Donated by: Waines, J.G., University of California, Plant Science Dept., Riverside, California 92521, United States. Received January 30, 1991.

PI 560055 donor id: L. 89. origin: USSR. source history:
Palestine via AUIPI, June 1975. collector id: J.I. 198.
other id: W6 9461. group: W6. received as: Pisum
elatius. Cultivated. Seed.

#### PI 560055 to 560060-continued

- PI 560056 donor id: L. 90. origin: USSR. source history:
  Palestine via AUIPI, June 1975. collector id: J.I. 198.
  other id: W6 9462. group: W6. received as: Pisum
  elatius. Cultivated. Seed.
- \* PI 560057 Pisum sativum var. pumilio Meikle FABACEAE Wildpea donor id: L. 92. origin: Portugal. collector id: J.I. 249. other id: W6 9463. group: W6. locality: Estacia Agronomica Nacional Lisbon. received as: Pisum elatius. Cultivated. Seed.
  - PI 560058 donor id: L. 104. origin: Israel. source history: Prof. Zohary, June 1975. collector id: 721. other id: W6 9464. group: W6. locality: In maquis formation, Mt. Carmel near Bat Shelomo, 5km NE of Zikkron Ya'akov. received as: Pisum elatius. Cultivated. Seed.
  - PI 560059 donor id: L. 105. origin: Israel. source history: Prof. Zohary, June 1975. collector id: 722. other id: W6 9465. group: W6. locality: In maquis formation, Admit, Western Galilee. received as: Pisum elatius. Cultivated. Seed.
  - PI 560060 donor id: L. 106. origin: Israel. source history: Env. of Caligari, Sardinia, Prof. Zohary, June 1975. collector id: 723. other id: W6 9466. group: W6. locality: In hedges, Env. of Caligari, Sardinia. received as: Pisum elatius. Cultivated. Seed.
- PI 560061 to 560067. Pisum fulvum Sibth. & Smith FABACEAE

**Donated by:** Waines, J.G., University of California, Plant Science Dept., Riverside, California 92521, United States. Received January 30, 1991.

- PI 560061 donor id: L. 91. origin: Israel. source history: Prof. Zohary. collector id: J.I. 224. other id: W6 9467. group: W6. Cultivated. Seed.
- PI 560062 donor id: L. 93. origin: Israel. source history: Prof. Zohary, Jerusalem, cole, June 1975. collector id: 701. other id: W6 9468. group: W6. locality: Among stones, Valley of the Cross. remarks: Small amphicarpic type. Cultivated. Seed.
- PI 560063 donor id: L. 94. origin: Israel. source history: Prof. Zohary, June 1975. collector id: 702. other id: W6 9469. group: W6. locality: Rocky places, Mt. Canaan, 2km E of Safed, Upper Galilee. Cultivated. Seed.

- PI 560064 donor id: L. 95. origin: Israel. source history: Prof. Zohary, June 1975. collector id: 703. other id: W6 9470. group: W6. locality: Env. of Var Giyyora, approx. 15km SW of Jerusalem. remarks: Climber on dwarf shrubs and shrubs. Cultivated. Seed.
- PI 560065 donor id: L. 96. origin: Israel. source history: Prof. Zohary, June 1975. collector id: 706. other id: W6 9471. group: W6. locality: In dwarf shrub formation on calcareous sandstone, Ruhama, southern coastal plain. Cultivated. Seed.
- PI 560066 donor id: L. 97. origin: Israel. source history: Prof. Zohary, June 1975. collector id: 707. other id: W6 9472. group: W6. locality: Openings in maquis formation and roadside, Adamit, Western Galilee. remarks: Side by side with Pisum elatius (722). Cultivated. Seed.
- PI 560067 donor id: L. 98. origin: Israel. source history: June 1975. collector id: 708. other id: W6 9473. group: W6. locality: On stone mounds and edges of abandoned cultivation, Jerusalem forest, 2km W of Jerusalem. remarks: Together with Pisum humile (711). Cultivated. Seed.
- PI 560068 to 560072. Pisum sativum var. pumilio Meikle FABACEAE

**Donated by:** Waines, J.G., University of California, Plant Science Dept., Riverside, California 92521, United States. Received January 30, 1991.

- PI 560068 donor id: L. 99. origin: Israel. source history: Prof. Zohary, June 1975. collector id: 711. other id: W6 9474. group: W6. locality: Edges of abandoned terrace cultivation, Jerusalem forest, 2km W of Jerusalem. remarks: Together with Pisum fulvum (708). received as: Pisum humile. Cultivated. Seed.
- PI 560069 donor id: L. 100. origin: Israel. source history: Prof. Zohary, June 1975. collector id: 712. other id: W6 9475. group: W6. locality: Wadi bed with loess deposit, 10km S of Be'er Sheva. remarks: Weed in barley cultivation. received as: Pisum humile. Cultivated. Seed.
- PI 560070 donor id: L. 101. origin: Israel. source history: Prof. Zohary, June 1975. collector id: 713. other id: W6 9476. group: W6. locality: Edges of cultivation and roadside, Beit kama, southern coastal plain. received as: Pisum humile. Cultivated. Seed.

## PI 560068 to 560072-continued

- PI 560071 donor id: L. 102. origin: Israel. source history: Prof. Zohary, June 1975. collector id: 714. other id: W6 9477. group: W6. locality: Edges of cultivation and roadside, Judean foothills between Bet Shemesh and Bet Guvrin. received as: Pisum humile. Cultivated. Seed.
- PI 560072 donor id: L. 103. origin: Israel. source history: Prof. Zohary, June 1975. collector id: 716. other id: W6 9478. group: W6. locality: In herbaceous vegetation on volcanic ash, Tel Abu Nida, approx., 3km NW of Quneitra, Golan Heights. remarks: Genuine wild type, branching profusely at early vegetative stages. received as: Pisum humile. Cultivated. Seed.
- PI 560073. Cuphea denticulata Kunth LYTHRACEAE

Donated by: Graham, S., Kent State University, Kent, Ohio, United States. Received July 25, 1991.

origin: Venezuela. cultivar: Fryxell 4381. collector id: Fryxell 4381. other id: Ames 6067. source: NC-7. group: Ames. Perennial. Wild. Seed.

PI 560074 to 560075. Zea mays L. subsp. mays POACEAE Corn

Donated by: Johnson, M.W., Pennsylvania Agr. Exp. Sta., Pennsylvania State University, University Park, Pennsylvania 16802, United States. remarks: No Certificate Requested. Received June 06, 1992.

PI 560074 origin: United States. developed: M.W. Johnson. origin institute: Pennsylvania Agr. Exp. Sta., Pennsylvania State University, University Park, Pennsylvania 16802 United States. cultivar: PA759. pedigree: (PA 761/H 73) PA 761BC6. other id: PL-160. source: Crop Sci. 32(6):1516 1992. group: CSR-MAIZE. restricted: CSR. remarks: AES700 mid maturity line. Mid silk in approx. the same number of days from planting as PA 761 or H 95. Plant ht. approx. 90-100cm. Leaf pattern semi-spreading, semi erect. Size medium. Tassels reddish with 6-8 branches. Ear length 25-30cm with 14-16 rows. Kernels medium, flat, yellow with reddish tinges. Cap lightly colored. Cob red. Stalk & root strength good. Combines well with derivatives of stiff stalk, Cl03 & OH43. Resistance avg. or above to northern leaf blight (Exserohilium turcicum) & southern leaf blight (Helminthosporium maydis). Spring Annual. Breeding Material. Seed.

# PI 560074 to 560075-continued

PI 560075 origin: United States. developed: M.W. Johnson. institute: Pennsylvania Agr. Exp. Sta., Pennsylvania State University, University Park, Pennsylvania 16802 United States. cultivar: PA760. pedigree: (PA 761/H 73) PA 761BC6. other id: PL-161. source: Crop Sci. group: CSR-MAIZE. restricted: CSR. 32(6):1516 1992. remarks: AES700 mid maturity line. Mid silk in approx. the same number of days from planting as PA 761 or H 95. Plant ht. approx. 90-100cm. Leaf pattern semi-spreading, semi-erect. Size medium. Tassels reddish with 6-8 branches. Ear length 25-30cm with 14-16 rows. Kernels medium, flat, yellow with reddish tinges. Cap lightly colored. Cob red. Stalk & root strength good. Combines well with derivatives of stiff stalk, Cl03 & OH43. Resistance avg. or above to northern leaf blight (Exserohilium turcicum) & southern leaf blight (Helminthosporium maydis). Spring Annual. Breeding Material. Seed.

# PI 560076 to 560079. Cuphea tolucana Peyr. LYTHRACEAE

**Donated by:** Knapp, S.J., Oregon State University, Corvallis, Oregon 97331, United States. Received November 14, 1991.

- PI 560076 donor id: TL 002. origin: UNCERTAIN. other id: Ames 7780. source: NC-7. group: Ames.
- PI 560077 donor id: TL 003. origin: UNCERTAIN. other id: Ames 7781. source: NC-7. group: Ames.
- PI 560078 donor id: TL 004. origin: UNCERTAIN. other id: Ames 7782. source: NC-7. group: Ames.
- PI 560079 donor id: TL 006. origin: UNCERTAIN. other id: Ames 7783. source: NC-7. group: Ames.
- PI 560080. Cuphea carthagenensis (Jacq.) J. F. Macbr. LYTHRACEAE

Donated by: Graham, S., Kent State University, Dept. Biological Science, Kent, Ohio 44141-0001, United States. Received April 11, 1991.

donor id: Graham 685. origin: Mexico. collected: September 05, 1978. collector: Graham, S.A.. other id: Ames 8318. source: NC-7. group: Ames. locality: Dry disturbed roadsides. Just North of Bridge, 4.5 km SE Coscomatepec on Hwy 131. elevation: 1400m. remarks: Chromosomes n=8. Annual. Wild. Seed.

Donated by: Johnson, M.W., Pennsylvania Agr. Exp. Sta., Pennsylvania State University, University Park, Pennsylvania 16802, United States. remarks: No Certificate Requested. Received June 06, 1992.

origin: United States. developed: M.W. Johnson. PI 560081 institute: Pennsylvania Agr. Exp. Sta., Pennsylvania State University, University Park, Pennsylvania United States. cultivar: PA778. pedigree: [(C103/Hooker's Ht B Source)(C1030C)] C103 Ht Ht. id: PL-162. source: Crop Sci. 32(6):1516 1992. group: CSR-MAIZE. restricted: CSR. remarks: AES700 maturity line. Mid silk and maturity earlier than Cl03. Height 130-140cm with ear placement 65-70cm. Leaf pattern spreading. Tassel medium sized, spreading. Grain yield and kernel type similar to Cl03. Ears develop approx. 14 rows. Kernels medium-yellow, dent. Stalk strength good. Resistance good to northern leaf blight (Exserohilium turcicum) & northern leaf spot (Bipolaris zeicola) race Combines well with derivatives of both IA stiff stalk and OH43. Spring Annual. Breeding Material. Seed.

PI 560082 origin: United States. developed: M.W. Johnson. origin institute: Pennsylvania Agr. Exp. Sta., Pennsylvania State University, University Park, Pennsylvania 16802 United States. cultivar: PA860. pedigree: WF 9 Synthetic 3 (75). other id: PL-163. source: Crop Sci. 32(6):1516 1992. group: CSR-MAIZE. restricted: CSR. remarks: AES800 maturity line similar in maturity to B73. Plant ht. approx. 170cm, ear ht. 80cm. Plant size medium. Tassels semi-spreading. Leaves medium-green with spreading type pattern. Kernels medium-yellow, small, semi-round with little or no denting. Ear small (15-20cm), with 14-16 rows. Cob red. Resistance good to both northern leaf blight (Exserohilium turcicum) & northern leaf spot (Bipolaris zeicola), race 3. Resistance intermediate to gray leaf spot (Cercospora zeae-maydis, Tehon & Daniels). Combines well with IA stiff stalk derivatives. Stalk strength good. Spring Annual. Breeding Material. Seed.

PI 560083. Cuphea lanceolata Aiton f. LYTHRACEAE

Donated by: Research Institute of Ecology and Botany, Hungarian Academy of Sciences, Botanical Garden, Vacratot, Hungary. Received April 18, 1991.

origin: UNKNOWN. origin institute: Research Institute of Ecology and Botany, Hungarian Academy of Sciences, Botanical Garden, Bacratot Hungary. other id: Ames 8365. source: NC-7. group: Ames. remarks: 1988 Index Seminum - Hungary #2335. Annual. Cultivated. Seed.

Donated by: Roath, W.W., North Central Reg. Plt. Intro. Stn., G212 Agronomy Bldg., Iowa State University, Ames, Iowa 50011, United States; and Widrlechner, M., North Central Reg. Plt. Intro. Stn., G212 Agronomy Bldg., Iowa State University, Ames, Iowa 50011, United States. remarks: 1989 East coast Cuphea collection trip. Received September 25, 1991.

- PI 560084 origin: United States. collected: September 11, 1989.
  other id: Ames 10774. source: NC-7. group: Ames.
  locality: Clay loam, in heavy compet. with blackberry,
  Symphoricarpos orbiculatus, Cassia fasciculata, and
  Ambrosia artemisiifolia 0.25 mi E US 62 on Kemar Rd., Low
  area 50 M N of Rd along power line, Paducah quad.
  Reidland city, in McCracken Cty. latitude: 37 deg. 1
  min. N. longitude: 88 deg. 31 min. W. elevation:
  106m. remarks: Population of 25 scattered plants. Seed.
- PI 560085 origin: United States. collected: September 11, 1989. other id: Ames 10775. source: NC-7. group: Ames. locality: Sand-gravel mixed; with Ambrosia trifida & artemisiifolia, Toxicodendron and Aster sp. on forest edge 1 mi E Miss. Riv on Laketon Rd., just E of Back Slough, Arlington quad. Laketon city, in Carlisle Cty. latitude: 36 deg. 52 min. N. longitude: 89 deg. 6 min. W. elevation: 92m. remarks: Population of 8 small plants. Seed.
- PI 560086 origin: United States. collected: September 12, 1989.

  other id: Ames 10776. source: NC-7. group: Ames.
  locality: Gravel rd edge, plts cut over, on N side or
  road with Eupatorium coelestinum, Carex sp, Euphorbia
  maculata, and Cercis. 0.1 mi NW TN 149 on Hematite Rd,
  Palmyra quad. Palmyra city, in Montgomery Cty. latitude:
  36 deg. 27 min. N. longitude: 87 deg. 27 min. W.
  elevation: 115m. remarks: Population of over 100
  plants. Seed.
- origin: United States. collected: September 13, 1989.
  other id: Ames 10777. source: NC-7. group: Ames.
  locality: In gravel rd. ditch, with Lonicera japonica,
  Solidago sp., Desmodium, and Fragaria 2.4 mi W int. Co.
  1162 & 1164 on 1164, Penland School Rd, Micaville quad.
  Penland city, in Mitchell Cty. latitude: 35 deg. 57 min.
  N. longitude: 82 deg. 8 min. W. elevation: 824m.
  remarks: Population of 3 plants. Seed.

- PI 560088 origin: United States. collected: September 14, 1989.
  other id: Ames 10778. source: NC-7. group: Ames.
  locality: On old railroad ballast with Cassia nictitans,
  Rubus argutus Rhus copallina, and Cirsium sp. Christian
  Camp, 1.25 mi S Hampton center, on old ET & WNCRR r.o.w.,
  near Doe River Gorge, Elizabethton quad. Hampton city,
  in Carter Cty. latitude: 36 deg. 16 min. N. longitude:
  82 deg. 10 min. W. elevation: 576m. remarks:
  Population of 8 scattered plants. Seed.
- PI 560089 origin: United States. collected: September 14, 1989.

  other id: Ames 10779. source: NC-7. group: Ames.

  locality: In sandy loam on east facing slope in cedar-oak pasture with Agrimonia, Solidago altissima, Monarda fistulosa, and Desmodium 2.4 mi N Amelia on Co. 1344, Sparta West quad. Amelia city, in Alleghany Cty.

  latitude: 36 deg. 35 min. N. longitude: 81 deg. 13 min. W. elevation: 752m. remarks: Population of 20 plants. Seed.
- PI 560090 origin: United States. collected: September 15, 1989.

  other id: Ames 10780. source: NC-7. group: Ames.
  locality: Thin shale soil, with Rubus trivialis, Aster
  pilosus, Fragaria virginiana, Echium vulgare and Daucus
  carota .3 mi from Co. 660 rr crossing, W of US11 660
  int., S of rr on top of embankment, Marion quad. Marion
  city, in Smyth Cty. latitude: 36 deg. 49 min. N.
  longitude: 81 deg. 34 min. W. elevation: 642m.
  remarks: Population of 12 plants. Seed.
- PI 560091 origin: United States. collected: September 17, 1989.
  other id: Ames 10782. source: NC-7. group: Ames.
  locality: In ditch at base of igneous rock with Scirpus,
  Ambrosia Trifida, Bidens bipinnata, and Perilla Int VA56
  & Co 687, 50 m N, on E side of 687, ditch along rock
  face, Massies Mill quad. Nash city, in Nelson Cty.
  latitude: 37 deg. 51 min. N. longitude: 79 deg. 3
  min. W. elevation: 348m. remarks: Population of 15
  plants. Seed.
- PI 560092 origin: United States. collected: September 17, 1989.
  other id: Ames 10783. source: NC-7. group: Ames.
  locality: Along gravel road ditch with Prunella,
  Fragaria, Trifolium pratense, and coarse grasses .8 mi E
  Co 702 on 744, Road ditch, S side of Rd, Lexington quad.
  Lexington city, in Rockbridge Cty. latitude: 37 deg. 47
  min. N. longitude: 79 deg. 25 min. W. elevation:
  294m. remarks: Population of 12 plants. Seed.

- PI 560093 origin: United States. collected: September 17, 1989.

  other id: Ames 10784. source: NC-7. group: Ames.
  locality: In a mix of rock and organic matter in a ditch at base of igneous rocks with Cercis, ox-eye daisy, Cichorium intybus and Daucus carota 4.3 mi W Goshen on VA 39, W side of rd and ditch, Green Valley quad. Goshen city, in Bath Cty. latitude: 38 deg. 0 min. N.
  longitude: 79 deg. 33 min. W. elevation: 497m.
  remarks: Population of 50 plants. Seed.
- PI 560094 origin: United States. collected: September 17, 1989.
  other id: Ames 10786. source: NC-7. group: Ames.
  locality: In rocky soil with Daucus carota, Oxalis,
  Centaurea, and Silene cucubalus 6 mi N I64 on Co 661, in
  field just SW where 661 crosses Ogle Creek, Rucker Gap
  quad. Callaghan city, in Alleghany Cty. latitude: 37
  deg. 54 min. N. longitude: 80 deg. 6 min. W.
  elevation: 567m. remarks: Population of over 200
  plants. Seed.
- PI 560095 origin: United States. collected: September 17, 1989.
  other id: Ames 10787. source: NC-7. group: Ames.
  locality: In gravel in clay ditches on sides of road with Ambrosia artemisiifolia, Daucus carota, Aster pilosus, and Setaria. 2.1 S US 60 on Co 50, N of bridge cross Anthony Creek, White Sulphur Springs quad. in Greenbrier Cty. latitude: 37 deg. 45 min. N. longitude: 80 deg. 16 min. W. elevation: 600m. remarks: Population of 20 plants. Seed.
- PI 560096 origin: United States. collected: September 18, 1989.
  other id: Ames 10788. source: NC-7. group: Ames.
  locality: In neutral soil (limestone) with Setaria,
  Acalypha, Medicago lupalina, and Aster pilosus 200 m NW
  of dam on golf course res. in rd. ditch on either side of
  the access rd. 803, Great Cacapon quad. Cacapon SP city,
  in Morgan Cty. latitude: 39 deg. 31 min. N. longitude:
  78 deg. 18 min. W. elevation: 321m. remarks:
  Population of 12 plants. Seed.
- origin: United States. collected: September 18, 1989.
  other id: Ames 10789. source: NC-7. group: Ames.
  locality: In crushed rock and organic matter with
  Xanthium, Ambrosia artemisiifolia, Cichorium and Bidens
  vulgata 200 m W Co 9/18, on WVA 9 W of Berkeley Springs
  on hill side of rd, Stotlers crossroads quad. In Morgan
  Cty. latitude: 39 deg. 37 min. N. longitude: 78 deg.
  15 min. W. elevation: 230m. remarks: Population of
  over 100 plants. Seed.

- PI 560098 origin: United States. collected: September 18, 1989.
  other id: Ames 10790. source: NC-7. group: Ames.
  locality: On clay loam at edge of old field with Setaria,
  Cichorium, Aster pilosus and Bidens vulgata .25 mi S int
  Co 18 & Co 18/1 on Co 18, Great Cacapon quad. Great
  Cacapon city, in Morgan Cty. latitude: 39 deg. 35 min.
  N. longitude: 78 deg. 20 min. W. elevation: 279m.
  remarks: Population of over 50 plants. Seed.
- PI 560099 origin: United States. collected: September 18, 1989.

  other id: Ames 10791. source: NC-7. group: Ames.
  locality: In crushed rock and clay at base of eroded hillside with Satureja acinos (MPW233), Ambrosia artemisiifolia, Plantago, Daucus carota, and Prunella .2 mi W bridge cross Cacapon River @ Largent, Largent quad. Largent city, in Morgan Cty. latitude: 39 deg. 29 min.
  N. longitude: 78 deg. 23 min. W. elevation: 176m. remarks: Population of over 100 plants. Seed.
- PI 560100 origin: United States. collected: September 18, 1989.
  other id: Ames 10792. source: NC-7. group: Ames.
  locality: In crushed rock in ditch on W side of road with Ambrosia artemisiifolia, Plantago, Daucus carota, and Aster pilosus. .65 mi NNE int us 50 & Co 50/13 on 50/13, Augusta quad. Augusta city, in Hampshire Cty. latitude: 39 deg. 18 min. N. longitude: 78 deg. 38 min. W. elevation: 379m. remarks: Population between 25-50 plants. Seed.
- PI 560101 origin: United States. collected: September 19, 1989.
  other id: Ames 10793. source: NC-7. group: Ames.
  locality: In roadside gravel above hillside pasture on
  west side of road with Ambrosia artemisiifolia, Setaria,
  Prunella, and Acalypha .9 mi SE Palestine on Co 24,
  Elizabeth quad. Palestine city, in Wirt Cty. latitude:
  39 deg. 2 min. N. longitude: 81 deg. 24 min. W.
  elevation: 227m. remarks: Population of 25 plants.
  Seed.
- PI 560102 origin: United States. collected: September 19, 1989.
  other id: Ames 10794. source: NC-7. group: Ames.
  locality: In loam along Co. 1 in grassy area with
  Agrimonia, Asclepias syriaca, Oxalis, and Daucus carota
  At int Co 1 & WVA 14, int to 50 m along N side of Co. 1,
  Elizabeth quad. Elizabeth city, in Wirt Cty. latitude:
  39 deg. 4 min. N. longitude: 81 deg. 25 min. W.
  elevation: 191m. remarks: Population of 20 plants.
  Seed.

- PI 560103 origin: United States. collected: September 20, 1989.
  other id: Ames 10795. source: NC-7. group: Ames.
  locality: In fescue meadow on beige clay soil with
  Oenothera biennis, Prunella, Ratibida, and Daucus carota
  150 m SW of Co. 824 along bike trail in A.J. Jolly
  (Campbell Co.) Park, New Richmond quad. A.J. Jolly Co
  Park city, in Campbell Cty. latitude: 38 deg. 53 min. N.
  longitude: 84 deg. 22 min. W. elevation: 215m.
  remarks: Population of 15 plants. Seed.
- PI 560104 origin: United States. collected: September 20, 1989.
  other id: Ames 10796. source: NC-7. group: Ames.
  locality: In weedy area under power line in beige clay with Ambrosia trifida, A. artemisiifolia, Aster pilosus, Setaria & Monarda fistulosa .4 mi W of int Harmony Rd & KY 227 on Harmony Rd, New Columbus quad. Harmony city, in Owen Cty. latitude: 38 deg. 23 min. N. longitude: 84 deg. 43 min. W. elevation: 245m. remarks: Population of 15 plants. Seed.
- PI 560105 origin: United States. collected: September 21, 1989.
  other id: Ames 10797. source: NC-7. group: Ames.
  locality: In ditch at base of rock outcrops with
  Rudbeckia, Eupatorium coelestinum, Euphorbia dentata, and
  Verbesina virginica. .3 mi E US 150 on Fairmount Rd, N
  roadside ditch Mount Washington quad. Fairmount city, in
  Jefferson Cty. latitude: 38 deg. 7 min. N. longitude:
  85 deg. 34 min. W. elevation: 185m. remarks:
  Population of 15 plants. Seed.
- PI 560106 origin: United States. collected: September 21, 1989.
  other id: Ames 10798. source: NC-7. group: Ames.
  locality: On W side of rd in grassy ditch with Commelina,
  Polygonum pennsylvanica, Solidago altissima, Vernonia,
  and Acalypha. 100 m S of int Stonestreet Rd. & Blevins
  Gap Rd on Blevins Gap. Valley Station quad. Stonestreet
  city, Jefferson Cty. latitude: 38 deg. 5 min. N.
  longitude: 85 deg. 50 min. W. elevation: 155m.
  remarks: Population of 10 plants. Seed.
- origin: United States. collected: September 21, 1989.
  other id: Ames 10799. source: NC-7. group: Ames.
  locality: On Limestone & organic matter slope. Edge of oak woods with Pycnanthemum tenuifolium, Toxicodendron, Solidago altissima. .15 mi S of IN 462 on Cold Friday Rd on bridle trail running NW from rd, Leavenworth quad.
  Harrison Cty. latitude: 38 deg. 12 min. N. longitude: 86 deg. 16 min. W. elevation: 252m. Seed.

- PI 560108 origin: United States. collected: September 22, 1989.
  other id: Ames 10800. source: NC-7. group: Ames.
  locality: In roadside gravel on edge of mixed hardwood
  forest with Coronilla, Setaria and other grasses .35 Mi
  NE Wyandotte Caves, T3S R2E NW 1/4 of NW 1/4 Sec. 27,
  Leavenworth quad. Harrison-Crawford SP city, in Crawford
  Cty. latitude: 38 deg. 14 min. N. longitude: 86 deg.
  17 min. W. elevation: 233m. remarks: Population of 3
  plants. Seed.
- PI 560109 origin: United States. collected: September 22, 1989.

  other id: Ames 10801. source: NC-7. group: Ames.
  locality: In roadside gravel and clay on east side of road with Setaria, Taraxacum, Desmodium and Oxalis 2 mi
  NNW Palmyra near Licking Creek, on McCracken Rd, T1S R3E
  N edge of NW 1/4 of NE 1/4 Sec. 13, Fredericksburg quad.
  Washington Cty. latitude: 38 deg. 26 min. N. longitude:
  86 deg. 8 min. W. elevation: 212m. remarks:
  Population of 8 plants. Seed.
- PI 560110 origin: United States. collected: September 22, 1989.

  other id: Ames 10802. source: NC-7. group: Ames.
  locality: In clay loam with Eupatorium rugosum and coelestinum, Setaria, Melilotus, Ambrosia trifida and Rubus occidentalis 8 mi S Salem IN 135 & .8 mi E on Co. to New Pekin, TlN R4E NW 1/4 of NW 1/4 Sec 28, Palmyra quad. In Washington Cty. latitude: 38 deg. 30 min. N. longitude: 86 deg. 5 min. W. elevation: 239m. remarks: Population of over 200 plants. Seed.
- PI 560111 origin: United States. collected: September 22, 1989.
  other id: Ames 10803. source: NC-7. group: Ames.
  locality: In moist pasture with Oxalis, Rosa multiflora,
  Lysimachia nummularia, Carex and Bromus .75 mi ESE
  Leipsic, 1.5 W of IN 60, along Co Rd, T3N RlE NE 1/4 of
  SW 1/4 Sec 25, Campbellsburg quad. Leipsic city, in
  Orange Cty. latitude: 38 deg. 40 min. N. longitude:
  86 deg. 21 min. W. elevation: 221m. remarks:
  Population of 25 well branched plants. Seed.
- PI 560112 origin: United States. collected: September 22, 1989.
  other id: Ames 10804. source: NC-7. group: Ames.
  locality: In clay & roadside gravel with Setaria,
  Trifolium pratense Cichorium and Euphorbia dentata 2.8
  NNW Paoli Court House, T2N RlW SW 1/4 of NE 1/4 Sec. 23,
  Paoli quad. Paoli city, in Orange Cty. latitude: 38
  deg. 35 min. N. longitude: 36 deg. 29 min. W.
  elevation: 236m. remarks: Population of about 200
  plants. Seed.

- origin: United States. collected: September 22, 1989.
  other id: Ames 10805. source: NC-7. group: Ames.
  locality: On light-colored clay and limestone along south side of road with Prunella, Aster lateriflorus, Daucus and Impatiens capensis .4 mi E Valeene Christian Church, TlS RlE NE 1/4 of SE 1/4 Sec. 16, Valeene qua Valeene city, in Orange Cty. latitude: 38 deg. 26 min. N. longitude: 86 deg. 24 min. W. elevation: 212m. remarks: Population of 7 plants. Seed.
- PI 560114 origin: United States. collected: September 23, 1989.

  other id: Ames 10806. source: NC-7. group: Ames.

  locality: Along roadside sassafras-multiflora rose
  thicket with Festuca, Trifolium pratense, and Ambrosia
  artemisiifolia. .75 mi SW Lawrenceport, .5 mi NE Spring
  Mill SP, Mitchell quad. Lawrenceport city, in Lawrence
  Cty. latitude: 38 deg. 45 min. N. longitude: 86 deg.
  24 min. W. elevation: 191m. remarks: Population of
  12 plants. Seed.
- PI 560115 to 560120. Triticum aestivum L., nom. cons. POACEAE Common wheat

Donated by: Long, D.L., Agricultural Research Service -- USDA, Cereal Rust Laboratory, University of Minnesota, St. Paul, Minnesota 55108, United States; and Georgia Agr. Exp. Sta.. remarks: Six Leaf Rust Resistant SRW Germplasms. Received March 10, 1991.

PI 560115 origin: United States. developed: D.L. Long, J.J.
Roberts, J.F. Schafer, J.W. Johnson H.A. Fowler, Jr.,
B.M. Cunfer. origin institute: Agricultural Research
Service -- USDA, Cereal Rust Laboratory, University of
Minnesota, St. Paul, Minnesota 55108 United States.
cultivar: CERUGA-1. pedigree: Nelson//Precoz
Parena/Coker 747. other id: CRL83139A4-2-2-4-2-3. other
id: GP-337. source: Crop Sci. 32(6):1514 1992. group:
CSR-WHEAT. restricted: CSR. remarks: Provides
protection against wide array of leaf rust races, derived
from resistance sources heretofore unused in this
country. Agronomically suited for use in the Southeast,
the Region for which it was developed. Very resistant to
Puccinia recondita and moderately resistant to Puccinia
graminis. Winter Annual. Breeding Material. Seed.

- PI 560116 origin: United States. developed: D.L. Long, J.J. Roberts, J.F. Schafer, J.W. Johnson H.A. Fowler, Jr., B.M. Cunfer. origin institute: Agricultural Research Service -- USDA, Cereal Rust Laboratory, University of Minnesota, St. Paul, Minnesota 55108 United States. cultivar: CERUGA-2. pedigree: Lani/Hunter//Coker 762. other id: CRL83170A12-6-3-3. other id: GP-338. Crop Sci. 32(6):1514 1992. group: CSR-WHEAT. restricted: CSR. remarks: Provides protection against wide array of leaf rust races. Major gene resistance derived from source which has not been used in this country in the field. Agronomically suited for use as a parent in the Southeast. Highly resistant to Puccinia recondita and moderately resistant to Puccinia graminis. Winter Annual. Breeding Material. Seed.
- PI 560117 origin: United States. developed: D.L. Long, J.J.
  Roberts, J.F. Schafer, J.W. Johnson H.A. Fowler, Jr.,
  B.M. Cunfer. origin institute: Agricultural Research
  Service -- USDA, Cereal Rust Laboratory, University of
  Minnesota, St. Paul, Minnesota 55108 United States.
  cultivar: CERUGA-3. pedigree: Coker 762\*2/Laborador.
  other id: CRL83212A7-1-4-5-3. other id: GP-339. source:
  Crop Sci. 32(6):1514 1992. group: CSR-WHEAT.
  restricted: CSR. remarks: Resistant to many races of
  leaf rust and is intended to serve as a rust-resistant
  parent in the Southeast. Agronomically suited for use in
  that area. Highly resistant to Puccinia recondita and has
  some resistance to Puccinia graminis. Winter Annual.
  Breeding Material. Seed.
- PI 560118 origin: United States. developed: D.L. Long, J.J.
  Roberts, J.F. Schafer, J.W. Johnson H.A. Fowler, Jr.,
  B.M. Cunfer. origin institute: Agricultural Research
  Service -- USDA, Cereal Rust Laboratory, University of
  Minnesota, St. Paul, Minnesota 55108 United States.
  cultivar: CERUGA-4. pedigree: Coker 916//Tyler/Buck
  Manantial. other id: CRL85044A-1-1-1. other id: GP-340.
  source: Crop Sci. 32(6):1514 1992. group: CSR-WHEAT.
  restricted: CSR. remarks: Provides a source of leaf and
  stem rust resistance for use in the Southeast.
  Well-adapted to the Southeast and should fit into
  cultivar development programs in that area. Highly
  resistant to Puccinia recondita and moderately resistant
  to Puccinia graminis. Winter Annual. Breeding Material.
  Seed.

- PI 560119 origin: United States. developed: D.L. Long, J.J.
  Roberts, J.F. Schafer, J.W. Johnson H.A. Fowler, Jr.,
  B.M. Cunfer. origin institute: Agricultural Research
  Service -- USDA, Cereal Rust Laboratory, University of
  Minnesota, St. Paul, Minnesota 55108 United States.
  cultivar: CERUGA-5. pedigree: Nelson//Precoz
  Parena/Coker 747. other id: CRL83139A4-2-2-4-2-1. other
  id: GP-341. source: Crop Sci. 32(6):1514 1992. group:
  CSR-WHEAT. restricted: CSR. remarks: Intended to serve
  as a source of rust resistance for the Southeast, the
  area for which it is well-adapted agronomically. Very
  resistant to Puccinia recondita and moderately resistant
  to Puccinia graminis. Winter Annual. Breeding
  Material. Seed.
- PI 560120 origin: United States. developed: D.L. Long, J.J.
  Roberts, J.F. Schafer, J.W. Johnson H.A. Fowler, Jr.,
  B.M. Cunfer. origin institute: Agricultural Research
  Service -- USDA, Cereal Rust Laboratory, University of
  Minnesota, St. Paul, Minnesota 55108 United States.
  cultivar: CERUGA-6. pedigree: Hunter\*2/Precoz Parana.
  other id: CRL83152Al-10-1. other id: GP-342. source:
  Crop Sci. 32(6):1514 1992. group: CSR-WHEAT.
  restricted: CSR. remarks: Developed to provide rust
  resistance to breeders in the Southeast in a type
  well-adapted for the area. Combines this resistance with
  a very suitable agronomic type for the Region. Highly
  resistant to Puccinia recondita and moderately resistant
  to Puccinia recondita. Winter Annual. Breeding
  Material. Seed.
- PI 560121 to 560127. Amblyopyrum muticum (Boiss.) Eig POACEAE Amblyopyrum

Donated by: Kimber, G., Department of Agronomy, University of Missouri, Columbia, Missouri 65211, United States. Received December 07, 1991.

- PI 560121 donor id: 84TK157-0003. origin: Turkey. collected: June 28, 1984. collector: R.J. Metzger, G. Kimber. collector id: 84TK157-0003. other id: W6 4320. group: W6. elevation: 180m. received as: Triticum tripsacoides. Annual. Wild. Seed.
- PI 560122 donor id: 84TK157-0004. origin: Turkey. collected: June 28, 1984. collector: R.J. Metzger, G. Kimber. collector id: 84TK157-0004. other id: W6 4321. group: W6. elevation: 180m. received as: Triticum tripsacoides. Annual. Wild. Seed.

### PI 560121 to 560127-continued

- PI 560123 donor id: 84TK157-0014. origin: Turkey. collected: June 28, 1984. collector: R.J. Metzger, G. Kimber. collector id: 84TK157-0014. other id: W6 4322. group: W6. elevation: 180m. received as: Triticum tripsacoides. Annual. Wild. Seed.
- PI 560124 donor id: 84TK157-0015. origin: Turkey. collected: June 28, 1984. collector: R.J. Metzger, G. Kimber. collector id: 84TK157-0015. other id: W6 4323. group: W6. elevation: 180m. received as: Triticum tripsacoides. Annual. Wild. Seed.
- PI 560125 donor id: 84TK157-0017. origin: Turkey. collected: June 28, 1984. collector: R.J. Metzger, G. Kimber. collector id: 84TK157-0017. other id: W6 4325. group: W6. elevation: 180m. received as: Triticum tripsacoides. Annual. Wild. Seed.
- PI 560126 donor id: 84TK157-0018. origin: Turkey. collected: June 28, 1984. collector: R.J. Metzger, G. Kimber. collector id: 84TK157-0018. other id: W6 4326. group: W6. elevation: 180m. received as: Triticum tripsacoides. Annual. Wild. Seed.
- PI 560127 donor id: 84TK157-0025. origin: Turkey. collected: June 28, 1984. collector: R.J. Metzger, G. Kimber. collector id: 84TK157-0025. other id: W6 4328. group: W6. elevation: 180m. received as: Triticum tripsacoides. Annual. Wild. Seed.
- PI 560128 to 560129. Triticum aestivum L., nom. cons. POACEAE Common wheat

**Donated by:** Kronstad, W.E., Oregon Agr. Exp. Sta., Oregon State University, Corvallis, Oregon 97331, United States. Received March 11, 1991.

PI 560128 origin: United States. developed: W.E. Kronstad. origin institute: Oregon Agr. Exp. Sta., Oregon State University, Dept. of Crop & Soil Science, Corvallis, Oregon 97331 United States. origin institute id: ORCR 8313. cultivar: HOFF. pedigree:

Probstdorfer-Extrem/Tobari 66. remarks: Hard red winter variety. Winter Annual. Cultivar. Seed.

- PI 560129 origin: United States. developed: W.E. Kronstad. origin institute: Oregon Agr. Exp. Sta., Oregon State
  University, Dept. of Crop & Soil Science, Corvallis,
  Oregon 97331 United States. cultivar: GENE. pedigree:
  Cleo/Pichon//Zenzontli. other id: OR 8300801. remarks:
  Soft white winter variety. Winter Annual. Cultivar.
  Seed.
- PI 560130 to 560134. Beta vulgaris L. CHENOPODIACEAE Sugarbeet

Donated by: Lewellen, R.T., Agricultural Research Service -- USDA, U.S. Agricultural Research Station, Salinas, California 93905, United States. Received March 09, 1991.

- PI 560130 origin: United States. cultivar: C762-17. pedigree: Sl extraction from population-762 that showed good GCA. Popn-762 = [(popn-C310aa x C546) aa x C718]. remarks: Monogerm, O-type, self-fertile, green hypocotyl line. Very high curly top resistance. Moderate resistance to bolting, powdery mildew, virus yellows, and lettuce infectious yellows. Susceptible to Erwinia. Canopy small, compact. High GCA for root yield, and low sucrose conc. Biennial. Breeding Material. Seed.
- PI 560131 origin: United States. cultivar: C796-43. pedigree:
  Extracted from population-796. Popn-796 was developed and improved from composite crosses between monogerm, CTR inbreds and multigerm, VYR lines. Bulked from single plant. other id: 0796-43. remarks: Monogerm, O-type, self-fertile, green hypocotyl line. Good monogerm and O-type traits. Moderately resistant to CTV, virus yellows, Erwinia, and bolting. Better yield and sucrose conc than C796-22. Biennial. Breeding Material. Seed.
- PI 560132 origin: United States. cultivar: C767-46. pedigree:
  Bulked from Sl plant extracted from popn-767.
  Popn=improved (popn-755 x C546). Identified for GCA in Sl
   TX progeny test. Reselected twice for improved O-type and monogerm. other id: 0767-46. remarks: Monogerm,
  O-type, self-fertile, green hypocotyl line. Moderately resistant to Erwinia, curly top, virus yellows, and bolting. Good GCA under diseased conditions for sugar yield. Low root yield, good sucrose conc type line.
  Leaves light green with wavy margins. Biennial.
  Breeding Material. Seed.

- PI 560133 origin: United States. cultivar: C766-62. pedigree:
  Advanced by bulk increases from single S2 plant. S2
  identified for disease resistance and GCA in an S2aa x
  tester progeny test of lines from popn-766. other id:
  9766-62. remarks: Monogerm, self-fertile, green
  hypocotyl line. Poor monogerm (bigerm) and O-type traits.
  Moderately resistant to Erwinia, curly top, virus yellows
  and bolting. Susceptible to powdery mildew. Good GCA for
  sugar yield under virus yellows conditions. Biennial.
  Breeding Material. Seed.
- PI 560134 origin: United States. cultivar: C312. pedigree:
  Derived from popn-C310/3 using an S1-TX progeny test.
  Narrow based line derived from one plant. other id:
  6827. remarks: Similar to lines C301 through C309
  extracted from popn-755. Monogerm, self-fertile, and
  segregates for hypocotyl color. Resistant to lettuce
  infectious yellows and adapted to Imperial Valley. Poor
  monogerm and O-type traits. Biennial. Breeding
  Material. Seed.
- PI 560135 to 560136. Beta vulgaris L. CHENOPODIACEAE Sugar beet

Donated by: Lewellen, R.T., Agricultural Research Service -- USDA, U.S. Agricultural Research Station, Salinas, California 93905, United States; and California Agr. Exp. Sta.; and Beet Sugar Development Fdn. and, Calif. Beet Growers Assn., Ltd.. remarks: C31-43 and C31-89 Sugarbeet Germplasms. Received March 09, 1991.

origin: United States. developed: R.T. Lewellen, S.R. PI 560135 Temple. origin institute: Agricultural Research Service -- USDA, U.S. Agricultural Research Station, Salinas, California 93950 United States. cultivar: C31-43. pedigree: Selected from C31/6 for hybrid performance under BYV conditions. Germplasm base originally very wide with both European and curly top resistant USA sources. other id: Y31-43. other id: GP-138. source: Crop Sci. 32(5):1297 1992. group: CSR-SUGARBEET. restricted: CSR. remarks: Multigerm, self-sterile line similar to C31-89 for most traits except higher sucrose conc. Tolerant to beet yellows virus (BYV) and beet western yellows virus. Moderately resistant to Erwinia root rot and powdery mildew (Erysiphe). Bolting resistant. Moderately susceptible to curly top virus. GCA for sugar yield good. Roots smooth. Beets extend above soil line. Per se performance very high, often superior to hybrids. Biennial. Breeding Material. Seed.

PI 560136 origin: United States. developed: R.T. Lewellen, S.R. Temple. origin institute: Agricultural Research Service -- USDA, U.S. Agricultural Research Station, Salinas, California 93905 United States. cultivar: C31-89. pedigree: Selected from C31/6 for hybrid performance under BYV conditions. Germplasm base originally very wide with both European and curly top resistant USA sources. other id: Y31-89. other id: GP-139. source: Crop Sci. 32(5):1297 1992. group: CSR-SUGARBEET. restricted: remarks: Multigerm, self-sterile line similar to C31-43 for most traits. Tolerant to beet yellows virus (BYV) and beet western yellows virus. Moderately resistant to Erwinia root rot and powdery mildew (Erysiphe). Bolting resistant. Moderately susceptible to curly top virus. GCA for sugar yield good. Roots smooth. Beets extend above soil line. Per se performance very high, often superior to hybrids. Biennial. Breeding Material. Seed.

PI 560137. Hordeum vulgare L. subsp. vulgare POACEAE Barley

Donated by: May, K.W., Lethbridge Res. Sta.--Agriculture Canada, P.O. Box 3000, Main, Lethbridge, Alberta TlJ 4Bl, Canada. remarks: Bridge Barley. Received March 09, 1991.

origin: Canada. developed: K.W. May. origin institute: Lethbridge Res. Sta.--Agriculture Canada, P.O. Box 3000, Main, Lethbridge, Alberta TlJ 4Bl Canada. cultivar: BRIDGE. pedigree: Zephyr/Hector (TR521)/2/Betzes/Piroline (TR516)/3/5\* Zephyr/Hector (TR521). other id: TR544. other id: CV-232. group: CSR-BARLEY. remarks: Two-rowed, hulled, spring feed variety suitable for growing in western part of the Canadian prairies. Combination of high yield potential, high test weight and large kernels. Moderate resistance to surface-borne smuts and common root rot. Spring Annual. Cultivar. Seed.

PI 560138. Trifolium pratense L. FABACEAE Red clover

Donated by: Quesenberry, K.H., Florida Inst. of Food and Agr. Science, University of Florida, Gainesville, Florida 32611-0152, United States. remarks: Cherokee Red Clover. Received March 09, 1991.

origin: United States. developed: K.H. Quesenberry, G.M. Prine, O.C. Ruelke, L.S. Dunavin, P. Mislevy. origin institute: Florida Inst. of Food and Agr. Science, University of Florida, Gainesville, Florida 32611-0152 United States. cultivar: CHEROKEE. pedigree: Five cycles of recurrent phenotypic selection for early vigor and flowering from base population 12% Nolins, 14% Tensas and 74% reseeding plant introduction selections. other id: PVP 9200166. source: Pending. group: PVPO. other id: CV-23. group: CSR-CLOVER, RED. restricted: CSR. patent: PVPO. remarks: Selected for early maturity and spring vigor. Improved resistance to root-knot nematodes (Meloidogyne arenaria, M. hapla, M. incognita, and M. javanica) compared to other red clover cultivars and germplasms. More non-dormant than other red clover cultivars. Biennial. Cultivar. Seed.

PI 560139. Hordeum vulgare L. subsp. vulgare POACEAE Barley

Donated by: Sammons, D.J., Maryland Agr. Exp. Sta., University of Maryland, College Park, Maryland 20742, United States. remarks: Tidewater Barley. Received March 01, 1991.

origin: United States. developed: D.J. Sammons. origin institute: Maryland Agr. Exp. Sta., Department of Agronomy, University of Maryland, College Park, Maryland 20742 United States. cultivar: TIDEWATER. pedigree: Purdue 466Al-17-15-25-15-5-8-2-5 / Rapidan. other id: CV-229. source: Crop Sci. 32(5):1294 1992. group: CSR-BARLEY. other id: MD 72025. restricted: CSR. remarks: Six-row winter feed variety adapted in Middle Atlantic Region from PA to NC. Maturity early. Yield potential high. Test weight moderate. Plant height under 95cm at maturity. Resistant to lodging. Winter hardy in region of adaptation. Moderately resistant to leaf rust (Puccinia hordei). Moderately susceptible to powdery mildew (Erysiphe graminis), net blotch (Pyrenophora teres), and scald (Rhynchosporium secalis). Winter Annual. Cultivar. Seed.

PI 560140. Gossypium barbadense L. MALVACEAE American pima cotton

Donated by: Turcotte, E.L., Agricultural Research Service -- USDA, 37860 W Smith-Enke Road, Maricopa, Arizona 85239, United States; and Arizona Agr. Exp. Sta.. remarks: Pima S-7 Cotton. Received March 01, 1991.

#### PI 560140-continued

origin: United States. developed: E.L. Turcotte, R.G. Percy, C.V. Feaster. origin institute: Agricultural Research Service -- USDA, 37860 W Smith-Enke Road, Maricopa, Arizona 85239 United States. cultivar: PIMA S-7. pedigree: F5 selection from 6614-91-9-3 / 6907-513-509-501. other id: CV-101. source: Crop Sci. 32(5):1291 1992. group: CSR-COTTON. restricted: CSR. remarks: Maturity early. Heat tolerant. Plant height average 109cm. Boll size 3.15g. Lint percentage average 38.6. Fiber properties average 34.5mm and 16.8mm for 2.5% and 50% span fiber lengths, 330 mN/tex T(1) fiber strength, and 3.94 micronaire units. Yarn strengths 180 mN/tex for 22's count, 178 mN/tex for 50's count, and 153 mN/tex for 80's count. Spring Annual. Cultivar. Seed.

## PI 560141 to 560147. Helianthus annuus L. ASTERACEAE

Donated by: Miller, J.F., Agricultural Research Service -- USDA, Northern Crops Science Lab, Fargo, North Dakota 58105, United States; and North Dakota Agr. Exp. Sta.. remarks: Five Oilseed Sunflower Restorer Germplasms and Two Nuclear Male-Sterile Populations. Received March 01, 1991.

PI 560141 origin: United States. developed: J.F. Miller. origin institute: Agricultural Research Service -- USDA, Northern Crops Science Lab, Fargo, North Dakota 58105 United States. cultivar: RHA 373. pedigree: RHA 274 / 82ROM-R31. other id: GP-169. source: Crop Sci. 32(5):1298 1992. group: CSR-SUNFLOWER. restricted: remarks: Provides broad range of diversity in agronomic, morphologic, & oil content characteristics. Available from use in sunflower breeding & hybrid development programs. Has genes for fertility restoration of PET1 (H. petiolaris, French) cytoplasmic male sterility. Upper stem nonbranched, single head. Resistant reaction to Downy mildew race 2 (Plasmopara halstedii). Oil content 503g kg-1. Plant height 108cm. 61-107 days from planting to plant stages R5.1 to R9.0. Breeding Material. Seed.

- origin: United States. developed: J.F. Miller. origin
  institute: Agricultural Research Service -- USDA, PI 560142 Northern Crops Science Lab, Fargo, North Dakota United States. cultivar: RHA 374. pedigree: Selection from ARG-R43 obtained through exchange with Estacion Experimental Agropecuaria, Pergamino, Argentina. id: GP-170. source: Crop Sci. 32(5):1298 1992. group: CSR-SUNFLOWER. restricted: CSR. remarks: Provides broad range of diversity in agronomic, morphologic, & oil content characteristics. Available from use in sunflower breeding & hybrid development programs. Has genes for fertility restoration of PET1 (H. petiolaris, French) cytoplasmic male sterility. Upper stem branched, multiple heads. Susceptible reaction to downy mildew race 2 (Plasmopara halstedii). Oil content 509g kg-1. Plant height 133cm. 64-112 days from planting to plant stages R5.1 and R9.0. Breeding Material. Seed.
- PI 560143 origin: United States. developed: J.F. Miller. institute: Agricultural Research Service -- USDA, Northern Crops Science Lab, Fargo, North Dakota 58105 United States. cultivar: RHA 375. pedigree: F3-derived F7 fertility restorer sister lines from RHA 296 / RHA other id: GP-171. source: Crop Sci. 32(5):1298 266. group: CSR-SUNFLOWER. restricted: CSR. remarks: Provides broad range of diversity in agronomic, morphologic, & oil content characteristics. Available from use in sunflower breeding & hybrid development programs. Has genes for fertility restoration of PET1 (H. petiolaris, French) cytoplasmic male sterility. Upper stem branched, multiple heads. Resistant reaction to downy mildew race 2 (Plasmopara halstedii). Oil content 519g kg-1. Plant height 125cm. 62-106 days from planting to plant stages R5.1 and R9.0. Breeding Material.
- PI 560144 origin: United States. developed: J.F. Miller. origin institute: Agricultural Research Service -- USDA, Northern Crops Science Lab, Fargo, North Dakota 58105 United States. cultivar: RHA 376. pedigree: RHA 296 / RHA 266. other id: GP-172. source: Crop Sci. 32(5):1298 group: CSR-SUNFLOWER. restricted: CSR. 1992. Provides broad range of diversity in agronomic, morphologic, & oil content characteristics. Available from use in sunflower breeding & hybrid development programs. Has genes for fertility restoration of PET1 (H. petiolaris, French) cytoplasmic male sterility. Upper stem nonbranched, single head. Resistant reaction to downy mildew race 2 (Plasmopara halstedii). Oil content 516g kg-1. Plant height 126cm. 61-106 days from planting to plant stages R5.1 and R9.0. Breeding Material. Seed.

PI 560145 origin: United States. developed: J.F. Miller. origin institute: Agricultural Research Service -- USDA, Northern Crops Science Lab, Fargo, North Dakota 58105 United States. cultivar: RHA 377. pedigree: RHA 299 / / Sorem HT 58 / RHA 801. other id: GP-173. source: Crop Sci. 32(5):1298 1992. group: CSR-SUNFLOWER. restricted: CSR. remarks: Provides broad range of diversity in agronomic, morphologic, & oil content characteristics. Available from use in sunflower breeding & hybrid development programs. Has genes for fertility restoration of PET1 (H. petiolaris, French) cytoplasmic male sterility. Upper stem branched, multiple heads. Resistant reaction to downy mildew race 2 (Plasmopara halstedii). Oil content 525g kg-1. Plant height 123cm. 60-105 days from planting to plant stages R5.1 and R9.0. Breeding Material. Seed.

PI 560146 origin: United States. developed: J.F. Miller. origin institute: Agricultural Research Service -- USDA, Northern Crops Science Lab, Fargo, North Dakota 58105 United States. cultivar: NMS 274. pedigree: BC5F4-derived sib-mated population between green, nuclear male-sterile plants and anthocyanin-pigmented, fertile plants. other id: GP-174. source: Crop Sci. 32(5):1298 1992. group: CSR-SUNFLOWER. restricted: CSR. remarks: Provides nuclear male-sterility sources for crossing and testcrossing. Available for use in sunflower breeding & hybrid development programs. Seeds produce approx. 50% green, sterile plants (tt, msms) & 50% anthocyanin-pigmented, fertile plants (Tt, MSms). Male sterility maintained by crossing green, sterile plants with anthocyanin-pigmented, fertile plants. Anthocyanin pigment detected in hypocotyl tissue when in V4 plant stage or in later stages in leaf venation. Anthers & stigmas also pigmented at anthesis. Small amount of pollen may be found on male-sterile plants. Breeding Material. Seed.

PI 560147 origin: United States. developed: J.F. Miller. origin institute: Agricultural Research Service -- USDA, Northern Crops Science Lab, Fargo, North Dakota 58105 United States. cultivar: NMS 801. pedigree: BC5F4-derived sib-mated population between green, nuclear male-sterile plants and anthocyanin-pigmented, fertile other id: GP-175. source: Crop Sci. 32(5):1298 plants. 1992. group: CSR-SUNFLOWER. restricted: CSR. remarks: Provides nuclear male-sterility sources for crossing and testcrossing. Available for use in sunflower breeding & hybrid development programs. Seeds produce approx. 50% green, sterile plants (tt,msms) & 50% anthocyanin-pigmented, fertile plants (Tt, MSms). Male sterility maintained by crossing green sterile plants with anthocyanin-pigmented, fertile plants. Anthocyanin pigment detected in hypocotyl tissue when in V4 plant stage or in later stages in leaf venation. Anthers & stigmas also pigmented at anthesis. Small amount of pollen may be found on male-sterile plants. Breeding Material. Seed.

PI 560148. Calendula suffruticosa M. Vahl ASTERACEAE

Donated by: Botanical Garden, University of Turku, Turku, Finland. Received March 16, 1991.

origin: Finland. origin institute: Botanical Garden, University of Turku, Turku SF-20500 Finland. other id: Ames 13150. source: NC-7. group: Ames. Wild. Seed.

PI 560149. Chrysanthemum coronarium L. ASTERACEAE

Donated by: Widrlechner, M.P., NCRPIS, Ames, Iowa 50011, United States. Received March 23, 1991.

origin: United States. collected: March 21, 1989. collector: Mark P. Widrlechner, NCRPIS. other id: Ames 10223. source: NC-7. group: Ames. locality: Collected at the South Bay Biological Study Area, Coronado, San Diego Co., California along bike path on east side of Highway 75. remarks: Wild plants with weeds including Avena. Wild. Seed.

PI 560150. Euonymus hamiltonianus Wallich CELASTRACEAE

Donated by: Holden Arboretum, Mentor, Ohio, United States. Received March 01, 1991.

## PI 560150-continued

donor id: NA 55282. origin: Korea, Republic of.
collector id: KNW 472. other id: Ames 8409. source:
NC-7. group: Ames. remarks: Collected at Chungchong
Nando, Sowon Myon. Wild. Plant.

PI 560151. Gypsophila paniculata L. CARYOPHYLLACEAE

Donated by: Research Institute of Ecology and Botany, Hungarian Academy of Sciences, Botanical Garden, Vacratot, Hungary. Received April 18, 1991.

donor id: 382 Index Seminum 1988. origin: Hungary. other id: Ames 8358. source: NC-7. group: Ames. remarks: Vacratot area - sand steppe. Festucetum vaginatae danubiale 1988 Index Seminum #382 - Hungary. Perennial. Wild. Seed.

PI 560152. Gypsophila muralis L. CARYOPHYLLACEAE

Donated by: Botanical Institute, Czechoslovak Academy of Science, Pruhonice, Czechoslovakia. Received March 16, 1991.

donor id: 302 Index Seminum 1989. origin:
Czechoslovakia. collector: M. Lhotska. other id: Ames
13177. source: NC-7. group: Ames. locality: Chrast nad
Sazavou - ruderal sites. elevation: 280m. Wild. Seed.

PI 560153 to 560154. Lavatera trimestris L. MALVACEAE

Donated by: Beltsville USDA, ARS, Beltsville, Maryland, United States. Received 1991.

PI 560153 origin: UNKNOWN. other id: PI A-7344. Seed.

PI 560154 origin: UNKNOWN. source history: Received at Glenn Dale from Dr. Quentin Jones, USDA-ARS, Beltsville. January 18, 1960.. other id: PI B-53169. source: Glenn Dale. Seed.

PI 560155. Malva nicaeensis All. MALVACEAE

Donated by: Sektion Biowissenschaften, d. Karl-Marx-Universitat, Botanischer Garten, Linnestrasse 1, Leipzig, Germany. Received June 12, 1991.

donor id: 1773 Index Seminum 1989. origin: Germany.
other id: Ames 13803. source: NC-7. group: Ames.
Cultivated. Seed.

PI 560156. Robinia viscosa var. hartwigii (Koehne) Ashe FABACEAE

Donated by: Peabody, F., Iowa State University, Botany Department, Ames, Iowa 50011, United States. Received April 17, 1991.

origin: United States. other id: Ames 2928. source: NC-7. group: Ames. locality: Whitesides, Macon Co., North Carolina. Wild.

PI 560157. Sorbaria sorbifolia (L.) A. Braun ROSACEAE

Donated by: Arboretum Kostelec, University of Agriculture - Prague, Kostelec nad Cernymi Lesy, Czechoslovakia. Received March 24, 1991.

donor id: 383 Index Seminum 1986. origin:
Czechoslovakia. other id: Ames 7778. source: NC-7.
group: Ames. Cultivated.

PI 560158. Spiraea hybrid ROSACEAE

Received 1991.

origin: USSR. other id: Ames 2971. source: NC-7. group: Ames. Cultivated. Seed.

PI 560159. Lens culinaris Medikus FABACEAE Lentil

Donated by: Wilson, V.E., Agricultural Research Service -- USDA, Western Regional PI Station, Washington State University, Pullman, Washington 99164, United States; and Washington State University, Pullman, Washington 99164, United States. Received February 24, 1991.

origin: United States. developed: V.E. Wilson, L.W. Hudson. origin institute: Agricultural Research Service — USDA, Washington State University, Pullman, Washington 99164 United States. cultivar: WH 2040. pedigree: Pure line selection from PI 297756 made between 1973 to 1977. other id: GP-1. source: Crop Sci. 18(6):1097 1978. group: CSR-LENTIL. other id: W6 10043. group: W6. remarks: Cold-tolerant adapted to winter environments of Palouse region of northern Idaho and Eastern Washington. Resistance to soilborne pathogens in field plots where 97% of other test plants were seriously damaged. First winter hardy lentil in the USA of commercial quality. Cultivar. Seed.

Donated by: Milligan, S.B., Louisiana Agr. Exp. Sta., Louisiana State University, Baton Rouge, Louisiana 70803, United States; and Agricultural Research Service - USDA; and American Sugar Cane League. remarks: LHo 83-153 Sugarcane. Received March 01, 1991.

origin: United States. developed: K.P. Bischoff, S.B. Milligan, F.A. Martin, E.O. Dufrene, J.P. Quebedeaux, K.L. Quebedeaux, J.W. Hoy, T.E. Reagan.. origin institute: Louisiana Agr. Exp. Sta., Agronomy Department, LSU, 103 M.B. Sturgis Hall, Baton Rouge, Louisiana United States. cultivar: LHo 83-153. pedigree: CP 77-405 / CP 74-339. other id: CV-91. source: Crop Sci. 32(5):1291 1992. group: CSR-SUGARCANE. restricted: CSR. remarks: Yielded well on silt loam & clay textured soils. Equal to CP 703-21 in total recoverable sucrose yield & cane yield in plant-cane crop. Superior to CP 70-321 in 1st & 2nd ratoon crops. High population of stalks similar in stalk weight, number & ratooning ability to CP 74-383. Recoverable sucrose content & maturity intermediate. Fiber content moderate (12.7%). Juice extraction avg. Generally erect, similarly suited to mechanical harvesting as CP 70-321. Res. to spread of sugarcane mosaic virus, smut, rust, & injury by sugarcane borer. Tol. to herbicides used in prod. Cultivar. Cutting.

PI 560161 to 560205. Carthamus tinctorius L. ASTERACEAE Safflower

Donated by: Urie, A.L., Agricultural Research Service -- USDA, 1691 So. 2700 W., P.O. Box 307, Aberdeen, Idaho 83210, United States. Received January 28, 1991.

PI 560161 origin: United States. developed: T.C. Heaton, P.F. Knowles. origin institute: California Agr. Exp. Sta., University of California, Davis, California 95616 United States. cultivar: UC-148. pedigree: Introduction from Afghanistan PI 253914 following treatment of the seedlings with colchicine. other id: GP-16. Crop Sci. 20(4):554 1980. group: CSR-SAFFLOWER. other id: W6 9814. remarks: Plants about 20cm taller than Gila. Leaves & involucral bracts spiny. Heads large. Flowers yellow in bloom stage which turn orange upon drying. Blooms approx. 10 days later than Gila. Seeds have smooth pericarp. Oil content about 30%. Susceptible to rust & verticillium wilt (Puccinia carthami & Verticillium dahliae). Resistance moderate to fusarium wilt (race 4 of Fusarium oxysporum) & phytophthora root rot (Phytophthora spp). Male sterility controlled by single nuclear recessive gene (5). Breeding Material. Seed.

- PI 560162 origin: United States. developed: T.C. Heaton, P.F. Knowles. origin institute: California Agr. Exp. Sta., University of California, Davis, California 95616 United States. cultivar: UC-149. pedigree: UC-148 / PI 340088. other id: GP-17. source: Crop Sci. 20(4):554 1980. group: CSR-SAFFLOWER. other id: W6 9815. remarks: Plants spiny. Flowers white and segregates 1:1, male sterile to fertile. Height and flowering date vary. Seeds have pericarp with smooth surface. Male sterility in line, as evidenced by lack of yellow pollen, is conspicuous due to white flower color. Not been evaluated for disease resistance. Breeding Material. Seed.
- PI 560163 origin: United States. developed: C.A. Thomas, D.E.
  Zimmer. origin institute: Agricultural Research Service
  -- USDA, Plant Science Research Division, Beltsville,
  Maryland 20705 United States. cultivar: USB.
  pedigree: Composite line from PI 250724 and PI 253538.
  other id: GP-10. source: Crop Sci. 11(4):606 1971.
  group: CSR-SAFFLOWER. other id: W6 9816. remarks:
  Resistance to Phytophthora drechsleri high. Resistance to root rot greater than that of Gila, Pacific 7, Ute and Frio. Maturity late. Seed low oil content. Breeding Material. Seed.
- PI 560164 origin: United States. developed: C.A. Thomas, L.H.
  Zimmerman, A.L. Urie.. origin institute: Agricultural
  Research Service -- USDA, Beltsville, Maryland 20705
  United States. cultivar: LMVFP-1. pedigree: Nebraska
  4051 (N 4051) / VR 14154 / VFR-1(3). other id: GP-14.
  source: Crop Sci. 18(6):1099 1978. group:
  CSR-SAFFLOWER. other id: W6 9817. remarks: Resistance
  to lettuce mosaic, verticillium wilt (Verticillium
  dahliae), fusarium wilt (Fusarium oxysporum), and
  phytophthora root and hypocotyl rot (Phytophthora
  drechsleri). Seed striped hull. Breeding Material.
  Seed.
- PI 560165 origin: United States. other id: 272-50. other id: W6 9818. remarks: Bulk of selected plants from a partial hull / UC-1 cross. All plants exhibited the partial hull character. Breeding Material. Seed.
- PI 560166 origin: United States. other id: 272-51. other id: W6 9819. remarks: Bulk of selected plants from a partial hull / UC-1 cross. All plants exhibited the partial hull character. Breeding Material. Seed.
- PI 560167 origin: United States. other id: 290-1. other id: W6 9820. remarks: Bulk of selected plants from a partial hull / UC-1 cross. All plants exhibited the partial hull character. Breeding Material. Seed.

# PI 560161 to 560205-continued

- PI 560168 origin: United States. other id: 290-2. other id: W6 9821. remarks: Bulk of selected plants from a partial hull / UC-1 cross. All plants exhibited the partial hull character. Breeding Material. Seed.
- PI 560169 origin: United States. other id: 296-16. other id: W6 9822. remarks: Bulk of selected plants from a partial hull / UC-1 cross. All plants exhibited the partial hull character. Breeding Material. Seed.
- PI 560170 origin: United States. other id: 43 partial. other id: W6 9823. remarks: Bulk of 35 plants from an F3 row originating from a partial hull / 14-5 cross. All plants exhibited the partial hull character. Breeding Material. Seed.
- PI 560171 origin: United States. other id: 47 partial. other id: W6 9824. remarks: Bulk of 72 plants from an F3 row originating from a partial hull / 14-5 cross. All plants exhibited the partial hull character. Breeding Material. Seed.
- PI 560172 origin: United States. other id: 53-1 par stp. other id: W6 9825. remarks: Bulk of selected F3 plants from a partial hull / 53-1 cross. All plants exhibited the striped partial hull character. Breeding Material. Seed.
- PI 560173 origin: United States. other id: ACl par stp. other id: W6 9826. remarks: Bulk of selected F3 plants from a partial hull / ACl cross. All plants exhibited the striped partial hull character. Seed.
- PI 560174 origin: United States. other id: Partial hull isolation. other id: W6 9827. remarks: Isolation planting of partial hull germplasm. Breeding Material. Seed.
- PI 560175 origin: United States. other id: S541 par stp. other id: W6 9828. remarks: Bulk of selected F3 plants from a partial hull / S-541 cross. All plants exhibited the striped partial hull character. Breeding Material. Seed.

- PI 560176 origin: United States. developed: A.L. Urie, D.J. DaVia, P.F. Knowles, L.H. Zimmerman.. origin institute: Agricultural Research Service -- USDA, Davis, California 95616 United States. cultivar: 14-5 ISO. pedigree: One of the 27 families that comprised VFstp-1(3). other id: GP-15. source: Crop Sci. 20(1):115 1980. group: CSR-SAFFLOWER. other id: W6 9829. remarks: Primary advantage is resistance to root rot (heterothallic & homothallic species of Phytophthora). Resistant to verticillium wilt (Verticillium dahliae) & fusarium wilt (Fusarium oxysporum). When compared in root rot nurseries, had consistently lower death rates then Gila and N10. Closely related to LMVFP-1(4), however, was not tested for resistance to lettuce mosaic virus. Developed after 4 yrs of extensive screening in naturally infested field root rot nurseries. One of the earliest flowering of the VFstp-1 families. Seed.
- origin: United States. developed: A.L. Urie, W.F.
  Peterson, P.F. Knowles. origin institute: Agricultural PI 560177 Research Service -- USDA, Davis, California 95616 United States. cultivar: OLEIC LEED. pedigree: UC-1(3) / olol / Leed. other id: CV-8. source: Crop Sci. 19(5):747 1979. group: CSR-SAFFLOWER. other id: W6 9830. remarks: Plant and seed characteristics similar to Leed. Slightly taller, blooms later, branching habit more profuse, and seeds smaller than either UC-1 or Gila. Flowers orange on most plants, but 3-4% flowers yellow. Seed has normal hull. Susceptible to rust (Puccinia carthami) verticillium wilt (Verticillium dahliae & fusarium wilt (Fusarium oxysporum). Entered in 16 yield tests over 3 year period, averaging 19.2% more oil/ha than UC-1 or Gila in irrigated tests and similar oil production in dryland tests. Breeding Material. Seed.
- PI 560178 origin: United States. cultivar: 11-2. other id: W6 9831. remarks: Resistant to Verticillium fusarium. Striped hull selection included in the VFstp-1 germplasm. Breeding Material. Seed.
- PI 560179 origin: United States. cultivar: 11-4. other id: W6 9832. remarks: Resistant to Verticillium fusarium. Striped hull selection included in the VFstp-1 germplasm. Breeding Material. Seed.
- PI 560180 origin: United States. cultivar: 11-5. other id: W6 9833. remarks: Resistant to Verticillium fusarium. Striped hull selection included in the VFstp-1 germplasm. Breeding Material. Seed.

- PI 560181 origin: United States. cultivar: 14-4. other id: W6 9834. remarks: Resistant to Verticillium fusarium. Striped hull selection included in the VFstp-1 germplasm. Breeding Material. Seed.
- PI 560182 origin: United States. cultivar: 14-5. other id: W6 9835. remarks: Resistant to Verticillium fusarium. Striped hull selection included in the VFstp-l germplasm. Breeding Material. Seed.
- PI 560183 origin: United States. cultivar: 19-2. other id: W6 9836. remarks: Resistant to Verticillium fusarium. Striped hull selection included in the VFstp-1 germplasm. Breeding Material. Seed.
- PI 560184 origin: United States. cultivar: 23-2. other id: W6 9837. remarks: Resistant to Verticillium fusarium. Striped hull selection included in the VFstp-l germplasm. Breeding Material. Seed.
- PI 560185 origin: United States. cultivar: 23-4. other id: W6 9838. remarks: Resistant to Verticillium fusarium. Striped hull selection included in the VFstp-l germplasm. Breeding Material. Seed.
- PI 560186 origin: United States. cultivar: 24-1. other id: W6 9839. remarks: Resistant to Verticillium fusarium. Striped hull selection included in the VFstp-1 germplasm. Breeding Material. Seed.
- PI 560187 origin: United States. cultivar: 24-2. other id: W6 9840. remarks: Resistant to Verticillium fusarium. Striped hull selection included in the VFstp-1 germplasm. Breeding Material. Seed.
- PI 560188 origin: United States. cultivar: 24-3. other id: W6 9841. remarks: Resistant to Verticillium fusarium. Striped hull selection included in the VFstp-l germplasm. Breeding Material. Seed.
- PI 560189 origin: United States. cultivar: 24-4. other id: W6 9842. remarks: Resistant to Verticillium fusarium. Striped hull selection included in the VFstp-1 germplasm. Breeding Material. Seed.
- PI 560190 origin: United States. cultivar: 4-1. other id: W6
  9843. remarks: Resistant to Verticillium fusarium.
  Striped hull selection included in the VFstp-1 germplasm.
  Breeding Material. Seed.

- PI 560191 origin: United States. cultivar: 40-2. other id: W6 9844. remarks: Resistant to Verticillium fusarium. Striped hull selection included in the VFstp-1 germplasm. Breeding Material. Seed.
- PI 560192 origin: United States. cultivar: 5-1. other id: W6
  9845. remarks: Resistant to Verticillium fusarium.
  Striped hull selection included in the VFstp-1 germplasm.
  Breeding Material. Seed.
- PI 560193 origin: United States. cultivar: 53-1. other id: W6 9846. remarks: Resistant to Verticillium fusarium. Striped hull selection included in the VFstp-1 germplasm. Breeding Material. Seed.
- PI 560194 origin: United States. cultivar: N4051. other id: W6 9847. remarks: Disease resistant parent. Breeding Material. Seed.
- PI 560195 origin: United States. cultivar: RUST-VERT. other id: W6 9848. remarks: Bulk of plants surviving rust and verticillium wilt screening nurseries. PCOY and VFstp-1 were sources of resistance. Breeding Material. Seed.
- PI 560196 origin: United States. other id: 1002-7. other id: W6 9849. remarks: Thrip resistant. Breeding Material. Seed.
- PI 560197 origin: United States. other id: Demo 114. other id: W6 9850. remarks: Spineless selection. Breeding Material. Seed.
- PI 560198 origin: United States. other id: Demo 138. other id: W6 9851. remarks: Spineless selection. Breeding Material. Seed.
- PI 560199 origin: United States. other id: Demo 149. other id: W6 9852. remarks: Spineless selection. Breeding Material. Seed.
- PI 560200 origin: United States. other id: Demo 157. other id: W6 9853. remarks: Spineless selection. Breeding Material. Seed.
- PI 560201 origin: United States. other id: Demo 158. other id: W6 9854. remarks: Spineless selection. Breeding Material. Seed.
- PI 560202 origin: United States. other id: Demo 210. other id: W6 9855. remarks: Spineless selection. Breeding Material. Seed.

#### PI 560161 to 560205-continued

- PI 560203 origin: United States. other id: Demo 212. other id: W6 9856. remarks: Spineless selection. Breeding Material. Seed.
- PI 560204 origin: United States. cultivar: MEXICO DWARF. other id: W6 9857. remarks: Early, non-rosette type from Mexico. Breeding Material. Seed.
- PI 560205 origin: United States. cultivar: MEXICO DWARF F3. other id: W6 9858. remarks: Mexico Dwarf / reduced hull selected in F3 for Mexico Dwarf type. Breeding Material. Seed.
- PI 560206. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Anand, S.C., Missouri Agr. Exp. Sta., P.O. Box 160, Portageville, Missouri 63873, United States. remarks: Delsoy 4210. Received March 17, 1991.

origin: United States. developed: S.C. Anand. origin institute: Missouri Agr. Exp. Sta., University of Missouri, P.O. Box 160, Portageville, Missouri 63873 United States. cultivar: Delsoy 4210. pedigree: L77-1233 x Douglas. other id: CV-298. source: Crop Sci. 32(5):1293 1992. group: CSR-SOYBEAN. other id: PVP 9200215. source: Pending. group: PVPO. restricted: CSR. patent: PVPO. remarks: Flowers white. Pubescence tawny. Maturity Group IV. Indeterminate. Resistant to SCN Races 3 & 14 and moderately resistant to Race 4. Moderate level of resistance to Sudden Death Syndrome (Fusarium solani). 40.8% seed protein & 20.8% oil compared with 41.8% seed protein and 20.3% oil of Pennyrile. Seeds yellow with black hila. 100 seed weight of 15.8g compared with 15.4g of Pennyrile. Spring Annual. Cultivar. Seed.

PI 560207. Glycine max (L.) Merr. FABACEAE Soybean

Donated by: Anand, S.C., Missouri Agr. Exp. Exp., P.O. Box 160, Portageville, Missouri 63873, United States. remarks: Delsoy 4710. Received March 17, 1991.

origin: United States. developed: S.C. Anand. origin institute: Missouri Agr. Exp. Sta., University of Missouri, P.O. Box 160, Portageville, Missouri 63873 United States. cultivar: Delsoy 4710. pedigree: L77-443 x L77-906. other id: CV-299. source: Crop Sci. 32(5):1294 1992. group: CSR-SOYBEAN. other id: PVP 9200216. source: Pending. group: PVPO. restricted: patent: PVPO. remarks: Flowers purple. Pubescence tawny. Maturity Group IV. Indeterminate. Resistant to SCN Races 3 & 14 and moderately resistant to Race 4. Moderate level of resistance to Meloidogyne incognita and M. arenaria. 38.9% seed protein & 20.3% oil compared with 41.8% seed protein and 20.3% oil of Pennyrile. Seeds yellow with black hila. 100 seed weight of 15.9g compared with 15.4g of Pennyrile. Spring Annual. Cultivar. Seed.

# PI 560208 to 560229. Oryza sp. POACEAE Rice

Donated by: Bockelman, Dr. Harold, USDA-ARS-NSGGRF, P.O. Box 307, Aberdeen, Idaho 83210, United States. Received January 16, 1991.

- \* PI 560208 Oryza sativa L. POACEAE Rice origin: Japan. cultivar: AKENSHOSHI. other id: F 151. other id: F 00151. Annual. Cultivated. Seed.
- \* PI 560209 Oryza sativa L. POACEAE Rice origin: Brazil. cultivar: TY 12 Japonica. pedigree: IRRI-IRCTN-1978 IP3. collector: EMBRAPA. other id: F 152. other id: F 00152. remarks: Origin-EMPRABA. Annual. Seed.
- \* PI 560210 Oryza sativa L. POACEAE Rice origin: Brazil. cultivar: Zho Fee No. 10. collector: EMBRAPA. other id: F 153. other id: F 00153. remarks: Origin-EMPRABA. Annual. Seed.
- \* PI 560211 Oryza sativa L. POACEAE Rice origin: Brazil. origin institute: EMBRAPA Brazil. cultivar: BR-IRGA 411. other id: F 154. other id: F 00154. Annual. Breeding Material. Seed.
- \* PI 560212 Oryza sativa L. POACEAE Rice origin: Brazil. origin institute: EMBRAPA Brazil. cultivar: BR-IRGA 413. other id: F 155. other id: F 00155. Annual. Breeding Material. Seed.
- \* PI 560213 Oryza sativa L. POACEAE Rice origin: Brazil. origin institute: EMBRAPA Brazil. cultivar: CL SELECRO 62A. other id: F 156. other id: F 00156. Annual. Cultivar. Seed.

### PI 560208 to 560229-continued

- \* PI 560214 Oryza sativa L. POACEAE Rice origin: Brazil. origin institute: EMBRAPA Brazil. cultivar: CL SELECRO 14. other id: F 158. other id: F 00158. Annual. Cultivar. Seed.
- \* PI 560215 Oryza sativa L. POACEAE Rice origin: Brazil. origin institute: EMBRAPA Brazil. cultivar: CL SELECRO 84. other id: F 159. other id: F 00159. Annual. Cultivar. Seed.
- \* PI 560216 Oryza sativa L. POACEAE Rice origin: Philippines. cultivar: FANNY DWARF. collector: IRRI, Manila. other id: F 162. other id: ACC101053. other id: F 00162. Annual. Cultivated. Seed.
- \* PI 560217 Oryza sativa L. POACEAE Rice origin: Philippines. cultivar: Tainan 5-72-536. collector: IRRI. other id: F 163. other id: ACC29944. other id: F 00163. remarks: IRRI. Annual. Seed.
- \* PI 560218 Oryza sativa L. POACEAE Rice origin: Philippines. cultivar: K8 mutant. collector: IRRI. other id: F 164. other id: ACC11073. other id: F 00164. remarks: IRRI. Annual. Seed.
- \* PI 560219 Oryza sativa L. POACEAE Rice origin: Philippines. cultivar: d 10. collector: IRRI. other id: F 165. other id: ACC104377. other id: F 00165. remarks: IRRI. Annual. Seed.
- \* PI 560220 Oryza sativa L. POACEAE Rice origin: Philippines. cultivar: DWARF B. THEEGA. collector: IRRI, Manila. other id: F 166. other id: ACC 67001. other id: F 00166. Annual. Cultivated. Seed.
- \* PI 560221 Oryza sativa L. POACEAE Rice origin: Philippines. cultivar: DWARF JENUGUDU. collector: IRRI, Manila. other id: F 167. other id: ACC 67002. other id: F 00167. Annual. Cultivated. Seed.
- \* PI 560222 Oryza sativa L. POACEAE Rice origin: Philippines. cultivar: DWARF J. SANNA. collector: IRRI, Manila. other id: F 168. other id: ACC 67003. other id: F 00168. Annual. Cultivated. Seed.
- \* PI 560223 Oryza sativa L. POACEAE Rice origin: Japan. origin institute: Fukuoka Seeds Japan. cultivar: HAPPY HILL NO. 2. other id: F 178. other id: F 00178. Annual. Cultivar. Seed.

### PI 560208 to 560229-continued

- \* PI 560224 Oryza sativa L. POACEAE Rice origin: UNCERTAIN. cultivar: AFAA MWANZA. other id: F 181. other id: F 00181. Annual. Cultivated. Seed.
- \* PI 560225 Oryza sativa L. POACEAE Rice origin: Philippines. cultivar: Rupsail. collector: IRRI. other id: F 182. other id: ACC 37287. other id: F 00182. remarks: IRRI. Annual. Seed.
- \* PI 560226 Oryza sativa L. POACEAE Rice origin: Philippines. cultivar: Rupsail. collector: IRRI. other id: F 183. other id: ACC 46586. other id: F 00183. remarks: IRRI. Annual. Seed.
- \* PI 560227 Oryza sativa L. POACEAE Rice origin: Philippines. cultivar: Rupsail. collector: IRRI. other id: F 184. other id: ACC 46587. other id: F 00184. remarks: IRRI. Annual. Seed.
- \* PI 560228 Oryza sativa L. POACEAE Rice origin: Philippines. cultivar: Rupsail. collector: IRRI. other id: F 185. other id: ACC 46588. other id: F 00185. remarks: IRRI. Annual. Seed.
- \* PI 560229 Oryza sativa L. POACEAE Rice origin: UNCERTAIN. cultivar: CHANDINA. other id: F 207. other id: F 00207. remarks: IRTP?. Annual. Cultivated. Seed.
- PI 560230 to 560232. Oryza sp. POACEAE Rice

Donated by: Lee, Dr. Fleet, USDA ARS RICE BRANCH STATION, University of Arkansas, P.O. Box 351, Stuggart, Arkansas 72160, United States. Received January 11, 1991.

- \* PI 560230 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali Colombia. cultivar: L. 370. other id: F 227. other id: 2701. other id: L. 370. other id: F 00227. Perennial. Seed.
- \* PI 560231 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali Colombia. cultivar: L. 410. other id: F 228. other id: 2701. other id: L. 410. other id: F 00228. Perennial. Seed.

#### PI 560230 to 560232-continued

- \* PI 560232 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali Colombia. cultivar: L. 570. other id: F 229. other id: 2701. other id: L. 570. other id: F 00229. Perennial. Seed.
- PI 560233 to 560294. Oryza sp. POACEAE Rice

Donated by: Lee, Dr. Fleet, USDA ARS RICE RESEARCH CENTER, University of Arkansas, P.O. Box 351, Stuggart, Arkansas 72160, United States. Received January 24, 1991.

- \* PI 560233 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. pedigree: LEMONT/QUILLA 64117/QUILLA. other id: F 230. other id: 2717. other id: F 00230. Perennial. Breeding Material. Seed.
- \* PI 560234 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. pedigree: LEMONT/QUILLA 64117/QUILLA. other id: F 231. other id: 2717. other id: F 00231. Perennial. Breeding Material. Seed.
- \* PI 560235 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6743-33-3-2-M-1-M-M. pedigree: LEMONT/QUILLA 65101/QUILLA 65101. other id: F 232. other id: 2717. other id: F 00232. Perennial. Breeding Material. Seed.
- \* PI 560236 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6743-5-8-3-M-2-M-M. pedigree: LEMONT/QUILLA 65101/QUILLA 65101. other id: F 233. other id: 2717. other id: F 00233. Perennial. Breeding Material. Seed.
- \* PI 560237 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6743-9-4-2-M-M-M. pedigree: LEMONT/QUILLA 65101. other id: F 234. other id: 2717. other id: F 00234. Perennial. Breeding Material. Seed.
- \* PI 560238 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6743-9-4-6-M-3-M-4. pedigree: LEMONT/QUILLA 65101/QUILLA 65101. other id: F 235. other id: 2717. other id: F 00235. Perennial. Breeding Material. Seed.

- \* PI 560239 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6744F2-CA-51. pedigree: LEMONT/QUILLA 66304/QUILLA 65101. other id: F 236. other id: 2717. other id: F 00236. Perennial. Breeding Material. Seed.
- \* PI 560240 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6742-12-CA-32. pedigree: LEMONT/DIAMANTE/DIAMANTE. other id: F 238. other id: 2717. other id: F 00238. Perennial. Breeding Material. Seed.
- \* PI 560241 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6742-20-7-1-M-2-M-4. pedigree: LEMONT/DIAMANTE/DIAMANTE. other id: F 239. other id: 2717. other id: F 00239. Perennial. Breeding Material. Seed.
- \* PI 560242 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6742-20-7-1-M-3-M-1. pedigree: LEMONT/DIAMANTE/DIAMANTE. other id: F 240. other id: 2717. other id: F 00240. Perennial. Breeding Material. Seed.
- \* PI 560243 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6746-4-1-CA-3. pedigree: LEMONT/DIAMANTE/DIAMANTE. other id: F 241. other id: 2717. other id: F 00241. Perennial. Breeding Material. Seed.
- \* PI 560244 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6746-5-CA-3. pedigree: LEMONT/DIAMANTE/DIAMANTE. other id: F 242. other id: 2717. other id: F 00242. Perennial. Breeding Material. Seed.
- \* PI 560245 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6746F2-CA-15. pedigree: LEMONT/DIAMANTE/DIAMANTE. other id: F 243. other id: 2717. other id: F 00243. Perennial. Breeding Material. Seed.

- \* PI 560246 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6747-CA-1. pedigree: LEMONT/QUILLA 64117/DIAMANTE. other id: F 244. other id: 2717. other id: F 00244. Perennial. Breeding Material. Seed.
- \* PI 560247 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6748-8-CA-17. pedigree: LEMONT/QUILLA 65101/DIAMANTE. other id: F 245. other id: 2717. other id: F 00245. Perennial. Breeding Material. Seed.
- \* PI 560248 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6749-21-4-3-M-1-M-2. pedigree: LEMONT/QUILLA 66304/DIAMANTE. other id: F 246. other id: 2717. other id: F 00246. Perennial. Breeding Material. Seed.
- \* PI 560249 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6749-21-4-5-M-2-M-M. pedigree: LEMONT/QUILLA 66304/DIAMANTE. other id: F 247. other id: 2717. other id: F 00247. Perennial. Breeding Material. Seed.
- \* PI 560250 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6749-21-4-7-M-2-M-3. pedigree: LEMONT/QUILLA 66304/DIAMANTE. other id: F 248. other id: 2717. other id: F 00248. Perennial. Breeding Material. Seed.
- \* PI 560251 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6749-23-3-1-M-3-M-4. pedigree: LEMONT/QUILLA 66304/DIAMANTE. other id: F 249. other id: 2717. other id: F 00249. Perennial. Breeding Material. Seed.
- \* PI 560252 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6749-36-3-3-M-3-M-4. pedigree: LEMONT/QUILLA 66304/DIAMANTE. other id: F 250. other id: 2717. other id: F 00250. Perennial. Breeding Material. Seed.

- \* PI 560253 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6749-36-9-7-M-3-M-3. pedigree: LEMONT/QUILLA 66304/DIAMANTE. other id: F 251. other id: 2717. other id: F 00251. Perennial. Breeding Material. Seed.
- \* PI 560254 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6749-36-9-7-M-5-M-5. pedigree: LEMONT/QUILLA 66304/DIAMANTE. other id: F 252. other id: 2717. other id: F 00252. Perennial. Breeding Material. Seed.
- \* PI 560255 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6749-41-3-6-1-3-M-3. pedigree: LEMONT/QUILLA 66304/DIAMANTE. other id: F 253. other id: 2717. other id: F 00253. Perennial. Breeding Material. Seed.
- \* PI 560256 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6749-43-3-7-M-3-M-5. pedigree: LEMONT/QUILLA 66304/DIAMANTE. other id: F 254. other id: 2717. other id: F 00254. Perennial. Breeding Material. Seed.
- \* PI 560257 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6750-9-2-1-1-M-M-1. pedigree: LEMONT/QUILLA 67103/DIAMANTE. other id: F 255. other id: 2717. other id: F 00255. Perennial. Breeding Material. Seed.
- \* PI 560258 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6750-9-2-1-M-3-M-4. pedigree: LEMONT/QUILLA 67103/DIAMANTE. other id: F 256. other id: 2717. other id: F 00256. Perennial. Breeding Material. Seed.
- \* PI 560259 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6750-9-2-1-M-3-M-5. pedigree: LEMONT/QUILLA 67103/DIAMANTE. other id: F 257. other id: 2717. other id: F 00257. Perennial. Breeding Material. Seed.

- \* PI 560260 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6750-9-2-4-2-M-M-3. pedigree: LEMONT/QUILLA 67103/DIAMANTE. other id: F 258. other id: 2717. other id: F 00258. Perennial. Breeding Material. Seed.
- \* PI 560261 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6750F2-9-2-M-2-M-2. pedigree: LEMONT/QUILLA 67103/DIAMANTE. other id: F 259. other id: 2717. other id: F 00259. Perennial. Breeding Material. Seed.
- \* PI 560262 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali Colombia. cultivar: P 5589-1-1-3P-4. pedigree: CAROLINO/TDX 1785-19-18/COLUMBIA 1/ TDX 1011-4-1. other id: F 260. other id: 2717. other id: F 00260. Perennial. Seed.
- \* PI 560263 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali Colombia. cultivar: P 5589-1-10-4-3-M. pedigree: CAROLINA/TDX 1785-19-18/COLOMBIA 1/TDX 1011-4-1. other id: F 261. other id: 2717. other id: F 00261. Perennial. Seed.
- \* PI 560264 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6196-33-11-1-3M. pedigree: COL 1 X M312A/IRAT 124/RHS 107-2-1-2-TB-1JM. other id: F 262. other id: 2717. other id: F 00262. Perennial. Breeding Material. Seed.
- \* PI 560265 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6241-17-1-5-1. pedigree: NGOVIE/TAIPEI 309/COL 1/M312A. other id: F 263. other id: 2717. other id: F 00263. Perennial. Breeding Material. Seed.
- \* PI 560266 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6261-5-7-2P-5. pedigree: CAMPONI/COL 1/M312A/1785-19-18. other id: F 264. other id: 2717. other id: F 00264. Perennial. Breeding Material. Seed.

- \* PI 560267 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6515-18-1-3-1-2. pedigree: TDX 1010-49-1/IRAT 121/DIWANI. other id: F 265. other id: 2717. other id: F 00265. Perennial. Breeding Material. Seed.
- \* PI 560268 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6515-18-1-3-1-4. pedigree: TDX 1010-49-1/IRAT 121/DIWANI. other id: F 266. other id: 2717. other id: F 00266. Perennial. Breeding Material. Seed.
- \* PI 560269 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6946-9-1-2-2-1-M. pedigree: TDX 1010-45-1/COL 1 X M312A/60142. other id: F 267. other id: 2717. other id: F 00267. Perennial. Breeding Material. Seed.
- \* PI 560270 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6947-7-1-1-1-7-M. pedigree: TDX 1010-45-1/COL 1 X M312A/60143. other id: F 268. other id: 2717. other id: F 00268. Perennial. Breeding Material. Seed.
- \* PI 560271 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT7179-31-1-1-4-40. pedigree: IRAT 194-1-2-1B/COL 1 X M312A/TDX 1177-32/ (UP 714). other id: F 269. other id: 2717. other id: F 00269. Perennial. Breeding Material. Seed.
- \* PI 560272 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT7232-5-3-7-5. pedigree: TDX 1010-45-1/COL 1 X M312A/IRAT 122/IAC 47. other id: F 270. other id: 2717. other id: F 00270. Perennial. Breeding Material. Seed.
- \* PI 560273 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT7378-2-1-3-1-4-M. pedigree: TDX 1010-24-2-1-1B/IRAT 122/TDX 1780-2-1-1P (2). other id: F 271. other id: 2717. other id: F 00271. Perennial. Breeding Material. Seed.

- \* PI 560274 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali Colombia. cultivar: ORO. other id: F 272. other id: 2717. other id: F 00272. Perennial. Seed.
- \* PI 560275 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali Colombia. cultivar: ORYZELLA. other id: F 274. other id: 2717. other id: F 00274. Perennial. Seed.
- \* PI 560276 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. cultivar: ESTRELA. other id: F 275. other id: 2717. other id: F 00275. Perennial. Cultivar. Seed.
- \* PI 560277 Oryza sativa L. POACEAE Rice origin: Colombia. cultivar: INDIO. collector: CIAT, Cali. other id: F 276. other id: 2717. other id: F 00276. Perennial. Cultivated. Seed.
- \* PI 560278 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali Colombia. cultivar: DELTA. other id: F 277. other id: 2717. other id: F 00277. Perennial. Cultivar. Seed.
- \* PI 560279 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali Colombia. cultivar: H 305-84. other id: F 278. other id: 2717. other id: F 00278. Perennial. Cultivar. Seed.
- \* PI 560280 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali Colombia. cultivar: Quilla 65101. other id: F 279. other id: 2717. other id: F 00279. Perennial. Seed.
- \* PI 560281 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali Colombia. cultivar: QUILLA 66304. other id: F 280. other id: 2717. other id: F 00280. Perennial. Seed.
- \* PI 560282 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. pedigree: Colombia/M312A. other id: F 281. other id: 2717. other id: F 00281. Perennial. Breeding Material. Seed.

- \* PI 560283 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali Colombia. cultivar: TDX1859-102-6M-3. other id: F 282. other id: 2717. other id: F 00282. Perennial. Seed.
- \* PI 560284 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali Colombia. cultivar: P-3844F3-19-1-13. pedigree: WC 137. other id: F 283. other id: 2717. other id: F 00283. Perennial. Seed.
- \* PI 560285 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali Colombia. cultivar: P 3084F4-56-2-2. pedigree: WC 118. other id: F 284. other id: 2717. other id: F 00284. Perennial. Seed.
- \* PI 560286 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali Colombia. cultivar: P 3059F4-79-1-1B. pedigree: WC 109. other id: F 285. other id: 2717. other id: F 00285. Perennial. Seed.
- \* PI 560287 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6279-4-6-6-4-M. pedigree: WC 240. other id: F 286. other id: 2717. other id: F 00286. Perennial. Breeding Material. Seed.
- \* PI 560288 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali Colombia. cultivar: P 4279F2-84-1-1X. pedigree: WC 145. other id: F 288. other id: 2717. other id: F 00288. Perennial. Seed.
- \* PI 560289 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali Colombia. cultivar: P 4743F2-85-6-1X. pedigree: WC 158. other id: F 289. other id: 2717. other id: F 00289. Perennial. Seed.
- \* PI 560290 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali, Valle Colombia. origin institute id: CT6047-13-5-3. pedigree: WC 203. other id: F 290. other id: 2717. other id: F 00290. Perennial. Breeding Material. Seed.

- \* PI 560291 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali Colombia. cultivar: P 4743F2-14-1. pedigree: WC 210. other id: F 292. other id: 2717. other id: F 00292. Perennial. Seed.
- \* PI 560292 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali Colombia. cultivar: P 5413-8-3-5-11-2X. pedigree: WC 213. other id: F 293. other id: 2717. other id: F 00293. Perennial. Seed.
- \* PI 560293 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali Colombia. cultivar: P 5746-18-11-2-2-2X. pedigree: WC 216. other id: F 294. other id: 2717. other id: F 00294. Perennial. Seed.
- \* PI 560294 Oryza sativa L. POACEAE Rice origin: Colombia. origin institute: CIAT, Apdo Aereo 6713, Cali Colombia. cultivar: P 5446-6-6-2-1. pedigree: WC 228. other id: F 295. other id: 2717. other id: F 00295. Perennial. Seed.
- PI 560295 to 560296. Oryza sp. POACEAE Rice

Donated by: Chang, Dr. T. T., International Rice Research Institute, P.O. Box 933, Manila, Luzon, Philippines. Received March 28, 1991.

- \* PI 560295 Oryza sativa L. POACEAE Rice origin: Philippines. cultivar: Rodjolele. collector: IRRI. other id: F 297. other id: 2853. other id: ACC 16554. other id: F 00297. remarks: Origin-Indonesia. Annual. Seed.
- \* PI 560296 Oryza sativa L. POACEAE Rice origin: Indonesia. cultivar: BAOK. collector: IRRI, Manila. other id: F 298. other id: 2853. other id: ACC 19248. other id: F 00298. Annual. Cultivated. Seed.
- PI 560297. Oryza sp. POACEAE Rice

Donated by: Idrobo, Jesus, Transversal 35, No 125-30, Bogota, Colombia. remarks: Received through J.A. Duke, National Germplasm Resources Lab USDA-ARS, Beltsville, Md. 20705. Received December 12, 1990.

### PI 560297-continued

\* Oryza sativa L. POACEAE Rice origin: Colombia. cultivar: Santa Julia. other id: F 664. locality: Igara-Parana River, about midway between Chorrera Yarica and the property of Senor Lara. remarks: Cultivated by BORA Indians. Reportedly resistant to pathogens and other pests. Annual. Primtiv-cv. Seed.

PI 560298 to 560299. Oryza sativa L. POACEAE Rice

Donated by: Foster, Ken, Nor-Cal Wild Rice, P.O. Box 940, Woodland, California 95695, United States. Received April 23, 1991.

PI 560298 origin: Italy. cultivar: VELA. other id: F 740. other id: BE-3361. Annual. Cultivar. Seed.

PI 560299 origin: Italy. cultivar: PANDA. other id: F 741. other id: BE-3361. Annual. Cultivar. Seed.

PI 560300. Glycine max (L.) Merr. FABACEAE Soybean

**Donated by:** Helena Chemical Company, United States. Received March 12, 1992.

origin: United States. origin institute: Helena Chemical Company United States. cultivar: HSC 623. other id: PVP 9200105. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 560301. Nierembergia hippomanica var. coerulea (Miers) Millan SOLANACEAE Nierembergia

Donated by: American Takii, Inc., United States. Received March 12, 1992.

origin: United States. origin institute: American Takii, Inc. United States. cultivar: NIEREMBERGIA MONT BLANC. other id: PVP 9200106. source: Application abandoned/withdrawn. group: PVPO. Cultivar. Seed.

PI 560302. Catharanthus roseus (L.) G. Don APOCYNACEAE Vinca

**Donated by:** University of Connecticut, Connecticut, United States. Received March 12, 1992.

#### PI 560302-continued

origin: United States. origin institute: University of Connecticut, Connecticut United States. cultivar: TROPICANA APRICOT. other id: PVP 9200107. source: Application abandoned/withdrawn. group: PVPO. Cultivar. Seed.

PI 560303. Catharanthus roseus (L.) G. Don APOCYNACEAE Vinca

Donated by: University of Connecticut, Connecticut, United States. Received March 12, 1992.

origin: United States. origin institute: University of Connecticut, Connecticut United States. cultivar: TROPICANA BLUSH. other id: PVP 9200108. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 560304. Catharanthus roseus (L.) G. Don APOCYNACEAE Vinca

Donated by: University of Connecticut, Connecticut, United States. Received March 12, 1992.

origin: United States. origin institute: University of Connecticut, Connecticut United States. cultivar: TROPICANA BRIGHT EYE. other id: PVP 9200109. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 560305. Catharanthus roseus (L.) G. Don APOCYNACEAE Vinca

Donated by: University of Connecticut, Connecticut, United States. Received March 12, 1992.

origin: United States. origin institute: University of Connecticut, Connecticut United States. cultivar: TROPICANA PINK. other id: PVP 9200110. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 560306. Catharanthus roseus (L.) G. Don APOCYNACEAE Vinca

Donated by: University of Connecticut, Connecticut, United States. Received March 12, 1992.

origin: United States. origin institute: University of Connecticut, Connecticut United States. cultivar: TROPICANA ROSE. other id: PVP 9200111. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 560307. Glycine max (L.) Merr. FABACEAE Soybean

**Donated by:** Northrup King Company, United States. Received March 12, 1992.

origin: United States. origin institute: Northrup King Company United States. cultivar: S59-60. other id: PVP 9200112. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 560308. Hordeum vulgare L. subsp. vulgare POACEAE Barley

Donated by: Western Plant Breeders, Inc., United States. Received March 12, 1992.

origin: United States. origin institute: Western Plant Breeders, Inc. United States. cultivar: WESTBRED MEDALLION. other id: PVP 9200113. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 560309. Medicago sativa L. FABACEAE Alfalfa

Donated by: Northrup King Company, United States. Received March 12, 1992.

origin: United States. origin institute: Northrup King Company United States. cultivar: VIKING 1. other id: PVP 9200114. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 560310. Phaseolus vulgaris L. FABACEAE Garden bean

**Donated by:** Del Monte Corporation, United States. Received March 12, 1992.

origin: United States. origin institute: Del Monte Corporation United States. cultivar: DMC 04-04. other id: PVP 9200116. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 560311. Phaseolus vulgaris L. FABACEAE Garden bean

**Donated by:** Del Monte Corporation, United States. Received March 12, 1992.

origin: United States. origin institute: Del Monte Corporation United States. cultivar: DMC 04-34. other id: PVP 9200117. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 560312. Phaseolus vulgaris L. FABACEAE Garden bean

Donated by: Del Monte Corporation, United States. Received March 12, 1992.

origin: United States. origin institute: Del Monte Corporation United States. cultivar: DMC 04-94. other id: PVP 9200118. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 560313. Phaseolus vulgaris L. FABACEAE Garden bean

**Donated by:** Del Monte Corporation, United States. Received March 12, 1992.

origin: United States. origin institute: Del Monte Corporation United States. cultivar: DMC 06-01. other id: PVP 9200119. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 560314. Phaseolus vulgaris L. FABACEAE Garden bean

Donated by: Del Monte Corporation, United States. Received March 12, 1992.

origin: United States. origin institute: Del Monte Corporation United States. cultivar: DMC 06-39. other id: PVP 9200120. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 560315. Phaseolus vulgaris L. FABACEAE Garden bean

Donated by: Del Monte Corporation, United States. Received March 12, 1992.

origin: United States. origin institute: Del Monte Corporation United States. cultivar: DMC 08-52. other id: PVP 9200121. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 560316. Zea mays L. subsp. mays POACEAE Field corn

Donated by: United AgriSeeds, Inc., United States. Received March 12, 1992.

origin: United States. origin institute: United
AgriSeeds, Inc. United States. cultivar: CS608. other
id: PVP 9200122. source: Pending. group: PVPO. patent:
PVPO. Cultivar. Seed.

PI 560317. Zea mays L. subsp. mays POACEAE Field corn

**Donated by:** Northrup King Company, United States. Received March 12, 1992.

origin: United States. origin institute: Northrup King Company United States. cultivar: 904. other id: PVP 9200123. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 560318. Triticum aestivum L., nom. cons. POACEAE Common wheat

**Donated by:** FFR Cooperative, United States. Received March 12, 1992.

origin: United States. origin institute: FFR Cooperative United States. cultivar: FFR 555W. other id: PVP 9200124. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 560319. Rosa sp. ROSACEAE

Donated by: Ankara University, Ankara, Turkey; and Sperling, C.R., Agricultural Research Service -- USDA, National Germplasm Resources Lab., Rm. 329, Bldg. 001, BARC-West, Beltsville, Maryland 20705-2350, United States. remarks: A USDA sponsored collection in cooperation with Oregon State University and IBPGR. Received January 1986.

donor id: TU85-063-01. origin: Turkey. collected:
August 3, 1985. collector: C.R. Sperling, D. Eser, H.H.
Gecit. collector id: TU85-063-01. other id: Ames 7478.
source: NC7. locality: Basalt, lava flow region, 0.5km
SE of Mus Province border on the Patnos-Mulizgirt road,
Agri Province. latitude: 39 deg. 08 min. N. longitude:
42 deg. 44 min. E. elevation: 1610m. remarks: Shrub to
1 - 1.5 ft. high forming low-spreading bush. Growing
among large lava boulders. Fruits red-orange. Spiny.
Wild. Seed.

PI 560320 to 560321. Acer monspessulanum L. ACERACEAE

Donated by: Ankara University, Ankara, Turkey; and Sperling, C.R., Agricultural Research Service -- USDA, National Germplasm Resources Lab., Rm. 329, Bldg. 001, BARC-West, Beltsville, Maryland 20705-2350, United States. remarks: A USDA sponsored collection in cooperation with Oregon State University and IBPGR. Received January 1986.

- PI 560320 donor id: TU85-6763. origin: Turkey. collected: July 15, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-6763. other id: Ames 7479. source: NC7. locality: Side of gravelly river bed. Shrubs and trees along river and rocky slopes. Scattered trees. Oak, Pistacia present. On road to Hakkari, 53km E of Uludere, Hakkari Province. latitude: 37 deg. 28 min. N. longitude: 43 deg. 12 min. E. elevation: 1360m. remarks: Small tree about 5m tall. Coppiced into several trunked tree, forming new shoots from base. Fruits mature, collected as germplasm. Leaves thick. Sperling Herbarium Voucher no. 6763. Wild. Seed.
- PI 560321 donor id: TU85-6765. origin: Turkey. collected: July 16, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-6765. other id: Ames 7480. source: NC7. locality: Steep, loose rocky S slope. North of Hakkari then W on road to Doganci, 26km N of Hakkari then 6km W of Zap River, Hakkari Province. latitude: 37 deg. 42 min. N. longitude: 43 deg. 51 min. E. elevation: 1500m. remarks: Tree about 3m tall. Common. Leaves thick. Sperling Herbarium Voucher no. 6765. Wild. Seed.

# PI 560322. Acer tataricum L. ACERACEAE

Donated by: Ankara University, Ankara, Turkey; and Sperling, C.R., Agricultural Research Service -- USDA, National Germplasm Resources Lab., Rm. 329, Bldg. 001, BARC-West, Beltsville, Maryland 20705-2350, United States. remarks: A USDA sponsored collection in cooperation with Oregon State University and IBPGR. Received January 1986.

donor id: TU85-018-03. origin: Turkey. collected: July 16, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-018-03. other id: Ames 7481. source: Ames. group: Ames. locality: On steep slopes of pure scree, 3km W on road to Doganci, 26km N of Hakkari, Hakkari Province. latitude: 37 deg. 40 min. N. longitude: 43 deg. 52 min. E. elevation: 1490m. remarks: Tree about 3m tall. Leaves not lobed. Samara peach colored. Associated plants: Celtis, Rhamnus, Prunus, Lonicera, Amygdalus, Pistacia, Quercus, Juniperus, and Acer monspessulanum. Sperling Herbarium Voucher no. 6771. Wild. Seed.

PI 560323 to 560328. Lycopersicon esculentum Miller, nom. cons. SOLANACEAE Tomato

Donated by: Scully, B.T., Texas A&M University Res. Center, Weslaco, Texas 78596-8399, United States. Received March 01, 1992.

- origin: United States. developed: P.W Leeper, S.C.
  Phatak, D.K. Bell, B.F. George, E.L. Cox, G.E. Oerther, PI 560323 B.T. Scully. origin institute: Texas A&M University Res. Center, Weslaco, Texas 78596-8399 United States. cultivar: 5635M. pedigree: Original parental material included Redcloud, Red Top, Rutgers, STEP 54, STEP 247, STEP 401, Stokesdale, Southland, and VF 145, which had L. pimpinellifolium in its pedigree. remarks: Superior tolerance to southern blight when grown in fields infested with 100kg ha-1 of S. rolfsii. Survival of SBR lines equivalent to the resistant PI 126432. Vines small, determinate. High harvest index. Leaf margins tend to curl toward midrib. Fruit set compact. Fruit color med.-dark red with shape, size and quality appropriate for processing. Globe to plum shaped with 2-3 locules. Peduncles jointed. Fruits average 73g and ripen uniformly. Cultivar. Seed.
- PI 560324 origin: United States. developed: P.W. Leeper, S.C. Phatak, D.K. Bell, B.F. George, E.L. Cox, G.E. Oerther, B.T. Scully. origin institute: Texas A&M University Res. Center, Weslaco, Texas 78596-8399 United States. cultivar: 5707M. pedigree: Original parental material
  included Redcloud, Red Top, Rutgers, STEP 54, STEP 247,
  STEP 401, Stokesdale, Southland, and VF 145, which had L. pimpinellifolium in its pedigree. remarks: Superior tolerance to southern blight when grown in fields infested with 100kg ha-1 of S. rolfsii. Survival of SBR lines equivalent to the resistant PI 126432. Vines small, determinate. High harvest index. Leaf margins tend to curl toward midrib. Fruit set compact. Fruit color med-dark red with shape, size and quality appropriate for processing. Plum shaped with 2-4 locules. Peduncles jointed. Fruits average 68g and ripen uniformly. Cultivar. Seed.
- PI 560325 origin: United States. developed: P.W. Leeper, S.C. Phatak, D.K. Bell, B.F. George E.L. Cox, G.E. Oerther, B.T. Scully. origin institute: Texas A&M University Res. Center, Weslaco, Texas 78596-8399 United States. cultivar: 5719M. pedigree: Original parents used included Southland STEP 54, STEP 247, and STEP 1021. remarks: Superior tolerance to southern blight when grown in fields infested with 100kg ha-1 of S. rolfsii. Survival of SBR lines equivalent to the resistant PI 126432. Vines small, determinate. High harvest index. Leaf margins tend to curl toward midrib. Fruit set compact. Fruit color med-dark red with shape, size and quality appropriate for processing. Fruits pear shaped with 3 locules. Peduncle jointed. Fruits average 50g and ripen uniformly. Cultivar. Seed.

- PI 560326 origin: United States. developed: P.W. Leeper, S.C. Phatak, D.K. Bell, B.F. George, E.L. Cox, G.E. Oerther, B.T. Scully. origin institute: Texas A&M University Res. Center, Weslaco, Texas 78596-8399 United States. cultivar: 5737M. pedigree: Original parents included Redcloud, Red Top, Rutgers, STEP 54, STEP 247, STEP 401, STEP 438, STEP 1021, Stokesdale, and Southland. remarks: Superior tolerance to southern blight when grown in fields infested with 100kg ha-1 of S. rolfsii. Survival of SBR lines equivalent to the resistant PI 126432. Vines small, determinate. High harvest index. Leaf margins tend to curl toward midrib. Fruit set compact. Fruit color med-dark red with shape, size and quality appropriate for processing. Shape blocky pear. Peduncles jointless. Green shouldered and average 55q. Cultivar. Seed.
- PI 560327 origin: United States. developed: P.W. Leeper, S.C. Phatak, D.K. Bell, B.F. George E.L. Cox, G.E. Oerther, B.T. Scully. origin institute: Texas A&M University Res. Center, Weslaco, Texas 78596-8399 United States. cultivar: 5913M. pedigree: Original parents included Redcloud, Red Top, Rutgers, STEP 54, STEP 247, STEP 401, STEP 438, STEP 1021, Stokesdale, and Southland. remarks: Superior tolerance to southern blight when grown in fields infested with 100kg ha-1 of S. rolfsii. Survival of SBR lines equivalent to the resistant PI 126432. Vines small, determinate. High harvest index. Leaf margins tend to curl toward midrib. Fruit set compact. Fruit color med-dark red with shape, size and quality appropriate for processing. Shape varies from blocky pear to blocky round. Both jointed and jointless types. Fruits ripen uniformly and average 86g. Cultivar. Seed.
- PI 560328 origin: United States. developed: P.W. Leeper, S.C. Phatak, D.K. Bell, B.F. George, E.L. Cox, G.E. Oerther, B.T. Scully. origin institute: Texas A&M University Res. Center, Weslaco, Texas 78596-8399 United States. cultivar: 5876M. pedigree: Original parents included Redcloud, Rutgers, STEP 54, STEP 247, STEP 1021, Stokesdale and Southland. remarks: Superior tolerance to southern blight when grown in fields infested with 100kg ha-1 of S. rolfsii. Survival of SBR lines equivalent to the resistant PI 126432. Vines small, determinate. High harvest index. Leaf margins tend to curl toward midrib. Fruit set compact. Fruit color med-dark red with shape, size and quality appropriate for processing. Fruit shape mostly blocky, tendency toward rounded to pear. Peduncles jointed. Fruits ripen uniformly and average about 45g. Cultivar. Seed.

PI 560329. Lycopersicon esculentum Miller, nom. cons. SOLANACEAE Tomato

Donated by: Lineberger, D.R., Texas A&M University, Dept. of Horticultural Sciences, College Station, Texas 77843-2133, United States. Received March 01, 1992.

origin: United States. developed: P.W. Leeper, E.L. Cox, B.T. Scully, G.E. Oerther, E.E. Burns, D.R. Lineberger. origin institute: Texas A&M University Res. Center, Weslaco, Texas 78596-8399 United States. cultivar: PROCESSOR 278. pedigree: Single plant selection derived from 5737M. remarks: Vines small, determinate. Plant canopy compact. Foliage avg. to moderately dense. Suitable for high density plantings. Resist. to southern blight. Field resist. to race 1 of Fusarium wilt & gray leaf spot. Crack resist. equivalent to Chico III. Adapted for fruit set at high relative humidities and high temp. Fruits firmer and more resistant to puffiness than Chico III. Fruit set compact. Few days earlier than Chico III. Jointless pedicels. In 8 trials, outyielded Chico III by 3 t ha-1. Better than Chico III for whole fruit color and pH. Cultivar. Seed.

PI 560330. Apium graveolens L. APIACEAE Celery

Donated by: Scully, B.T., Everglades Res. and Ed. Center, IFAS, University of Florida, Belle Glade, Florida 33430-8003, United States. Received March 01, 1992.

origin: United States. developed: E.A. Wolf, B.T. Scully. origin institute: Everglades Res. and Ed. Center, IFAS, University of Florida, Belle Glade, Florida 33430-8003 United States. cultivar: FLORIBELLE M9. pedigree: EES 1624-2 / EES 1625-2. Both had superior resistance to early blight and bacterial leaf spot. remarks: Growth habit inter. bet. Crystal Jumbo & Ordinary Utah phenotypes. Mid-season cultivar maturing in 92-99 days from transplanting. Ht. range 64-76cm with avg. ht. 69-70cm. More robust appearance than Earlibelle or Florida 2-14. Stalk shape compact, cylindrical, similar to Tall Utah 52-70 R Imp. Heart formation not as full as Tall Utah 52-70 R Imp. Avg. 3-4 heart leaves on Florida histosols. Greater suscept. to boron related transverse cracking in nodal region and longitudinal cracking than Earlibelle. Suscept. to blackheart. Resist. to seed thermodormancy. Cultivar. Seed.

PI 560331. Hordeum vulgare L. subsp. vulgare POACEAE Barley

Donated by: Lawless, J.R., Kansas Agr. Exp. Sta., Northwest Research-Extension Center, Colby, Kansas 67701, United States. remarks: Weskan Barley. Received March 20, 1992.

origin: United States. developed: J.R. Lawless, T.J. Martin, M.D. Witt, R.G. Sears, V.A. Schaffer. origin institute: Kansas Agr. Exp. Sta., Northwest Res,.-Ext. Cntr., Colby, Kansas 67701 United States. cultivar: WESKAN. pedigree: Purdue 6515A2 / KY66-7-63-1294. other id: 82C58. other id: CV-233. group: CSR-BARLEY. restricted: CSR. remarks: Six-rowed, rough awned, winter feed variety. Height medium. Maturity mid-season. Spike semi-lax, short to mid-long, slightly inclined at maturity. Kernels short to mid-long. Lemmas slightly wrinkled. Long-haired characteristics were similar to hardy check varieties Kearney and Dicktoo in USDA hardiness trials. In Kansas trials, height averaged 65cm but ranged from 43-86cm, depending on environment. Lodging resistance poor under conditions producing excessive growth. Winter Annual. Cultivar. Seed.

PI 560332. Medicago sativa L. FABACEAE Alfalfa

Donated by: Woodward, W.T.W., Pioneer Hi-Bred International, Inc., P.O. Box 287, Johnston, Iowa 50131, United States. remarks: 5683 Alfalfa. Received March 20, 1992.

origin: United States. developed: W.T.W. Woodward, L.D. Satterlee, G.E. Hoard, D.L. Jessen, E.F. Poynor, D.J. Miller, M.A. Smith. origin institute: Pioneer Hi-Bred International, Inc., P.O. Box 287, Johnston, Iowa 50131 United States. cultivar: 5683. pedigree: Twenty clone synthetic with parents originating from several experimental lines tracing to Washoe, Caliverde 65, and other id: PVP 8900181. source: Certificate in Lahontan. group: PVPO. other id: CV-173. group: force. CSR-ALFALFA. other id: W6 10458. group: W6. restricted: CSR. patent: PVPO. remarks: Semidormant adapted to the San Joaquin & Sacramento valleys of CA, & high desert valleys of CA, AZ, NM & TX for hay, haylage, greenchop & dehydration. Expected to be adapted where other semidormant alfalfas are grown. Tested using XAS61 & YAS61 experimental designations. Flower color of Syn 3 generation purple with trace of variegated. Growth habit erect in mid summer & nearly erect in fall. Fall dormancy similar to Mesilla. High res. to spotted alfalfa aphid. Res. to Fusarium wilt, Phytophthora root rot, stem nematode, pea aphid. Mod. res. to bacterial wilt, blue aphid. Cultivar. Seed.

PI 560333. Medicago sativa subsp. falcata (L.) Arcang. FABACEAE Alfalfa

Donated by: Bingham, E.T., Wisconsin Agr. Exp. Sta., University of Wisconsin, Madison, Wisconsin 53706-1597, United States. remarks: WISFAL Alfalfa. Received March 24, 1992.

origin: United States. developed: E.T. Bingham. origin institute: Wisconsin Agr. Exp. Sta., University of Wisconsin, 1575 Linden Drive, Madison, Wisconsin 53706-1597 United States. cultivar: WISFAL. pedigree: Tetraploid derived from 20 M. falcata using 2n eggs in 2x-4x crosses. other id: 4x WISFAL-1. other id: WISFAL-T88. other id: GP-259. group: CSR-ALFALFA. other id: W6 7209. group: W6. restricted: CSR. remarks: Robust vegetatively and fertile in intrastrain or interstrain crosses with cultivated alfalfa M. sativa. Thus unrestricted gene flow from WISFAL to any desired cultivated tetraploid cultivar, strain or population. Typical of diploid M. falcata PI gp adapted to the North Central USA. Fall dormant. Broad based M. falcata synthetic and good source of genetic variation in plant morphology, and in reactions to disease and insect pests. Perennial. Breeding Material. Seed.

PI 560334. Triticum aestivum L., nom. cons. POACEAE Common wheat

Donated by: Sadasivaiah, R.S., Lethbridge Res. Sta. - Agriculture Canada, P.O. Box 3000, Main, Lethbridge, Alberta TlJ 4Bl, Canada. remarks: AC Reed Soft White Spring Wheat. Received March 24, 1992.

origin: Canada. developed: R.S. Sadasivaiah, J.B. Thomas, R.L. Conner. origin institute: Lethbridge Res. Sta. - Agriculture Canada, P.O. Box 3000, Main, Lethbridge, Alberta TlJ 4Bl Canada. cultivar: AC REED. pedigree: Developed from a single plant selection made in F4 bulk of PT303/Dirkwin//Kenya 321/Fieldwin. other id: CV-786. group: CSR-WHEAT. restricted: CSR. remarks: Semi-dwarf bearded wheat, 74cm. Yield high. Maturity early, 107 days. Lodging resistance good. Spikes oblong to tapering, middense, midlong, erect to seminodding, glabrous, and white at maturity. Shattering resistance moderate. Kernels soft, creamy white, midesize, midlong, midwide and ovate. Resist. to stripe rust (Puccinia striiformis). Moderately resistant to powdery mildew (Erysiphe graminis) and sprouting. Has good milling & cookie baking qualities. Adapted to irrigated regions of southern Alberta and Saskatchewan. Spring Annual. Cultivar. Seed.

PI 560335. Triticum turgidum L. POACEAE Durum wheat

Donated by: Friebe, B., Kansas Agr. Exp. Sta., Kansas State University, Manhattan, Kansas 66506-5502, United States; and Agricultural Research Service -- USDA; and Technical University of Munich. remarks: KS91WGRC14 T1BL-1RS. Received March 24, 1992.

origin: United States. developed: B. Friebe, B.S. Gill, T.S. Cox, F.J. Zeller. origin institute: Kansas Agric. Exp. Station/USDA-ARS, Kansas State University, Manhattan, Kansas 66506-4008 United States. origin institute id: KS91WGRC14. pedigree: BC1F2 derived line from Cando \*2 / Veery. other id: GP-343. group: CSR-WHEAT. restricted: CSR. remarks: Durum wheat germplasm homozygous for T1BL IR5 wheat-rye chromosome translocations with resistance to stem rust (Puccinia graminis) and powdery mildew (Erysiphe graminis). Spring Annual. Breeding Material. Seed.

PI 560336 to 560342. Beta vulgaris L. CHENOPODIACEAE Sugarbeet

Donated by: Lewellen, R.T., Agricultural Research Service -- USDA, U.S. Agricultural Research Station, Salinas, California 93905, United States. Received March 24, 1992.

- PI 560336 origin: United States. cultivar: C39R. pedigree: Early version of line C39 (NSSL BV-788 serial No. 220741) by phenotypic recurrent selection. Derived from a broadly based population. other id: R39. remarks: Multigerm, self-sterile. High level of quantitatively inherited resistance to rhizomania (beet necrotic yellow vein virus). Sugar yield higher than most other lines or hybrids under severe disease conditions. Only about half resistance expressed in hybrid combinations. Moderately resistant to virus yellows, powdery mildew, Erwinia, curly top and bolting. Biennial. Breeding Material. Seed.
- PI 560337 origin: United States. cultivar: C39R4-6. pedigree:
  Advanced from fourth cycle of selection for resistance to rhizomania from line C39. other id: R39-6. remarks:
  Multigerm, self-sterile line advanced from full-sib family. Similar to C39R for rhizomania resistance, but better resistance to bolting. Narrowly based and more uniform than C39R or C39. Biennial. Breeding Material. Seed.

- PI 560338 origin: United States. cultivar: C47R. pedigree:
  Selected from an early version of line C47 by phenotypic recurrent selection for resistance to rhizomania. other id: R47. remarks: Multigerm, self-sterile line. Moderate level of quantitatively inherited resistance to rhizomania (beet necrotic yellow vein virus). Shows moderate loss under moderate to severe rhizomania conditions. Moderate resistance to virus yellows, curly top, Erwinia, and powdery mildew. Traits similar to C47. Biennial. Breeding Material. Seed.
- PI 560339 origin: United States. cultivar: C93. pedigree: Derived by 5 cycles of selection from a composite involving C36 and C37/Y723 and Y726. other id: Y48. remarks:

  Multigerm, self-sterile line developed from composite cross by phenotypic recurrent selection for resistance to virus yellows, Erwinia and powdery mildew. Emphasis placed on improvement for sucrose conc. Good tolerance to virus yellows. Sucrose concentration higher but root yield lower than lines C39, C47, C54 etc. Biennial. Breeding Material. Seed.
- PI 560340 origin: United States. cultivar: C94. pedigree: Derived from composite crosses and selections for resistance to rhizomania within Fort Collins and GW germplasm, including lines FC 703, FC 705, FC 709, GW 674 and GW 359. other id: R20. remarks: Multigerm, self-sterile line. Resistance moderate to rhizomania and Rhizoctonia root rot. Susceptible to virus yellows, powdery mildew, bolting, and curly top under California conditions. Sucrose conc. low. Biennial. Breeding Material. Seed.
- origin: United States. developed: R.T. Lewellen, E.D. PI 560341 Whitney. origin institute: Agricultural Research Service -- USDA, U.S. Agricultural Research Station, 1636 E Alisal Street, Salinas, California 93905 United States. cultivar: C58. pedigree: Derived from composite crosses between C91 and B. maritima acc. WB41, 42, & 151 (Denmark), WB 187 & 188 (GB), WB318 (France), and WB 169 (Italy). other id: 89-C58. other id: GP-142. group: CSR-SUGARBEET. restricted: CSR. remarks: Multigerm, self-sterile. Broad based population derived from crosses between sugarbeet and B. maritima. Greenhouse and field grown plants selected for resistance to rhizomania by visual and elisa (BNYVV) methods. Segregates for annualism, root and leaf color, root and leaf shape, resistance to diseases. Retains many wild beet traits. In a series of greenhouse tests, 62% of plants were highly resistant to rhizomania, 59% to Phytophthora drechsleri, 70% to E. carotovora betavasculorum and 24% were visually free of powdery mildew. Biennial. Breeding Material. Seed.

- PI 560342 origin: United States. cultivar: C47. pedigree:
  Composite involving C36 & C37/C01, C31, C46, & C91. Five cycles of phenotypic recurrent selection were used.
  other id: Y47. remarks: Multigerm, self-sterile. Derived from broadly based population in an attempt to combine high productivity with resistance to virus yellows, curly top, bolting, Erwinia and powdery mildew. Good per se and hybrid performance. Moderate resistance to above diseases. Primarily adapted to California and similar arid environments. Biennial. Breeding Material. Seed.
- PI 560343 to 560501. Sorghum bicolor (L.) Moench POACEAE Sorghum

Donated by: Wenzel, W.G., Grain Crops Research Institute, Private Bag X1251, Potchefstroom 2520, South Africa. remarks: Received through P. Bramel-Cox, Dept. of Agronomy, Kansas State University, Throckmorton Hall, Manhattan, Kansas 66506. Received January 28, 1992.

- PI 560343 donor id: SA 1774. origin: South Africa. other id: TEST. locality: Cornelia, Lebowa. remarks: Race caffra. Cultivated. Seed.
- PI 560344 donor id: SA 1775. origin: South Africa. other id: IS 1107. group: IS. locality: Thabanoopo, Lebowa. remarks: Race caffra. Cultivated. Seed.
- PI 560345 donor id: SA 1776. origin: South Africa. locality:
  Cornelia, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560346 donor id: SA 1777. origin: South Africa. locality:
  Mosea, Venda. remarks: Race caffra. Cultivated. Seed.
- PI 560347 donor id: SA 1778. origin: South Africa. locality: Yarside, Venda. remarks: Race caudatum. Cultivated. Seed.
- PI 560348 donor id: SA 1779. origin: South Africa. locality: Cornelia, Lebowa. remarks: Race caffra. Cultivated. Seed.
- PI 560349 donor id: SA 1780. origin: South Africa. locality:
  Thabanoopo, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560350 donor id: SA 1781. origin: South Africa. other id: IS 1108. group: IS. locality: Thabanoopo, Lebowa. remarks: Race caffra. Cultivated. Seed.

- PI 560351 donor id: SA 1782. origin: South Africa. locality:
  Sebediela, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560352 donor id: SA 1783. origin: South Africa. locality:
  Menenghe, Venda. remarks: Race caffra. Cultivated.
  Seed.
- PI 560353 donor id: SA 1784. origin: South Africa. locality: Zwigodini, Venda. remarks: Race durra. Cultivated. Seed.
- PI 560354 donor id: SA 1785. origin: South Africa. locality: Garside, Venda. remarks: Race caffra. Cultivated. Seed.
- PI 560355 donor id: SA 1786. origin: South Africa. locality:
  Galakwena, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560356 donor id: SA 1787. origin: South Africa. locality:
  Matsa, Venda. remarks: Race caffra. Cultivated. Seed.
- PI 560357 donor id: SA 1788. origin: South Africa. locality: Sekukhune, Lebowa. remarks: Race caffra x bicolor. Cultivated. Seed.
- PI 560358 donor id: SA 1789. origin: South Africa. locality: Sekukhune, Lebowa. remarks: Race caffra x bicolor. Cultivated. Seed.
- PI 560359 donor id: SA 1790. origin: South Africa. locality:
  Ysselsdrift, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560360 donor id: SA 1791. origin: South Africa. locality: Zwigodini, Venda. remarks: Race caffra. Cultivated. Seed.
- PI 560361 donor id: SA 1792. origin: South Africa. locality:
  Thabanoopo, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560362 donor id: SA 1793. origin: South Africa. locality: Sekukhune, Lebowa. remarks: Race caffra x bicolor. Cultivated. Seed.
- PI 560363 donor id: SA 1794. origin: South Africa. locality:
  Sekukhune, Lebowa. remarks: Race caffra. Cultivated.
  Seed.

- PI 560364 donor id: SA 1795. origin: South Africa. locality: Zwigodini, Venda. remarks: Race bicolor x caffra. Cultivated. Seed.
- PI 560365 donor id: SA 1796. origin: South Africa. locality:
  Mosea, Venda. remarks: Race caffra. Cultivated. Seed.
- PI 560366 donor id: SA 1797. origin: South Africa. other id: IS 855. group: IS. locality: Mokerong, Lebowa. remarks: Race bicolor. Cultivated. Seed.
- PI 560367 donor id: SA 1799. origin: South Africa. locality:
  Sekukhune, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560368 donor id: SA 1800. origin: South Africa. locality:
  Mosea, Venda. remarks: Race caudatum. Cultivated.
  Seed.
- PI 560369 donor id: SA 1802. origin: South Africa. locality: Tshisimani, Venda. remarks: Race caffra x bicolor. Cultivated. Seed.
- PI 560370 donor id: SA 1803. origin: South Africa. locality:
  Masenghe, Venda. remarks: Race caffra x bicolor.
  Cultivated. Seed.
- PI 560371 donor id: SA 1804. origin: South Africa. locality:
  Masea, Venda. remarks: Race bicolor. Cultivated. Seed.
- PI 560372 donor id: SA 1805. origin: South Africa. locality:
  Cornelia, Lebowa. remarks: Race guinea x caffra.
  Cultivated. Seed.
- PI 560373 donor id: SA 1806. origin: South Africa. locality:
  Mokerong, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560374 donor id: SA 1807. origin: South Africa. locality:
  Sekukhune, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560375 donor id: SA 1808. origin: South Africa. locality:
  Masea, Venda. remarks: Race bicolor x caffra.
  Cultivated. Seed.
- PI 560376 donor id: SA 1809. origin: South Africa. locality:
  Cornelia, Lebowa. remarks: Race caffra. Cultivated.
  Seed.

- PI 560377 donor id: SA 1810. origin: South Africa. locality:
  Sekukhune, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560378 donor id: SA 1811. origin: South Africa. locality: Selogesese, Lebowa. remarks: Race caffra. Cultivated. Seed.
- PI 560379 donor id: SA 1812. origin: South Africa. locality: Selogesese, Lebowa. remarks: Race caffra x guinea. Cultivated. Seed.
- PI 560380 donor id: SA 1813. origin: South Africa. locality:
  Sekukhune, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560381 donor id: SA 1814. origin: South Africa. locality: Tshisimani, Venda. remarks: Race caffra. Cultivated. Seed.
- PI 560382 donor id: SA 1815. origin: South Africa. locality: Zwigodini, Venda. remarks: Race caffra. Cultivated. Seed.
- PI 560383 donor id: SA 1816. origin: South Africa. locality: Tshisimani, Venda. remarks: Race caffra. Cultivated. Seed.
- PI 560384 donor id: SA 1817. origin: South Africa. locality:
  Salem, Lebowa. remarks: Race caffra. Cultivated. Seed.
- PI 560385 donor id: SA 1818. origin: South Africa. locality:
  Thabonoopo, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560386 donor id: SA 1819. origin: South Africa. locality:
  Thabonoopo, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560387 donor id: SA 1820. origin: South Africa. locality: Selogose, Lebowa. remarks: Race caffra. Cultivated. Seed.
- PI 560388 donor id: SA 1822. origin: South Africa. locality: Haakdoringdraai, Venda. remarks: Race caffra. Cultivated. Seed.
- PI 560389 donor id: SA 1823. origin: South Africa. locality: Seshego, Lebowa. remarks: Race caffra. Cultivated. Seed.

- PI 560390 donor id: SA 1824. origin: South Africa. locality: Seshego, Lebowa. remarks: Race caffra. Cultivated. Seed.
- PI 560391 donor id: SA 1825. origin: South Africa. locality: Seshego, Lebowa. remarks: Race caffra. Cultivated. Seed.
- PI 560392 donor id: SA 1826. origin: South Africa. locality:
  Sekukhune, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560393 donor id: SA 1827. origin: South Africa. locality:
  Sekukhune, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560394 donor id: SA 1828. origin: South Africa. locality: Selogosese, Lebowa. remarks: Race caffra. Cultivated. Seed.
- PI 560395 donor id: SA 1829. origin: South Africa. locality:
  Selogosese, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560396 donor id: SA 1830. origin: South Africa. locality: Seshego, Lebowa. remarks: Race caffra. Cultivated. Seed.
- PI 560397 donor id: SA 1832. origin: South Africa. locality:
  Sekukhune, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560398 donor id: SA 1834. origin: South Africa. locality:
  Manenzhe, Venda. remarks: Race bicolor. Cultivated.
  Seed.
- PI 560399 donor id: SA 1835. origin: South Africa. locality:
  Manenzhe, Venda. remarks: Race bicolor x candatum.
  Cultivated. Seed.
- PI 560400 donor id: SA 1836. origin: South Africa. locality:
  Sekukhune, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560401 donor id: SA 1837. origin: South Africa. locality:
  Selogosese, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560402 donor id: SA 1838. origin: South Africa. locality: Sekukhune, Lebowa. remarks: Race caffra x bicolor. Cultivated. Seed.

- PI 560403 donor id: SA 1839. origin: South Africa. locality:
  Mokerong, Lebowa. remarks: Race caffra x candatum.
  Cultivated. Seed.
- PI 560404 donor id: SA 1840. origin: South Africa. locality:
  Thabanoopo, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560405 donor id: SA 1841. origin: South Africa. locality: Seshego, Lebowa. remarks: Race guinea x caffra. Cultivated. Seed.
- PI 560406 donor id: SA 1842. origin: South Africa. locality: Selogosese, Lebowa. remarks: Race caffra. Cultivated. Seed.
- PI 560407 donor id: SA 1843. origin: South Africa. locality: Seshego, Lebowa. remarks: Race caffra. Cultivated. Seed.
- PI 560408 donor id: SA 1844. origin: South Africa. locality: Seshego, Lebowa. remarks: Race caffra. Cultivated. Seed.
- PI 560409 donor id: SA 1845. origin: South Africa. locality: Zwigodini, Venda. remarks: Race bicolor x caffra. Cultivated. Seed.
- PI 560410 donor id: SA 1846. origin: South Africa. locality: Zwigodini, Venda. remarks: Race caffra x bicolor. Cultivated. Seed.
- PI 560411 donor id: SA 1847. origin: South Africa. locality: Tshisimani, Venda. remarks: Race guinea. Cultivated. Seed.
- PI 560412 donor id: SA 1848. origin: South Africa. locality: Tshisimani, Venda. remarks: Race bicolor x caffra. Cultivated. Seed.
- PI 560413 donor id: SA 1849. origin: South Africa. locality: Zwigodinia, Venda. remarks: Race bicolor x caffra. Cultivated. Seed.
- PI 560414 donor id: SA 1850. origin: South Africa. locality: Zwigodinia, Venda. remarks: Race guinea. Cultivated. Seed.
- PI 560415 donor id: SA 1851. origin: South Africa. locality: Sekukhune, Lebowa. remarks: Race caffra. Cultivated. Seed.

- PI 560416 donor id: SA 1852. origin: South Africa. locality:
  Sebediele, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560417 donor id: SA 1853. origin: South Africa. locality:
  Selogosese, Lebowa. remarks: Race guinea. Cultivated.
  Seed.
- PI 560418 donor id: SA 1854. origin: South Africa. locality: Haakdoringdraai, Lebowa. remarks: Race candatum. Cultivated. Seed.
- PI 560419 donor id: SA 1855. origin: South Africa. locality: Seshego, Lebowa. remarks: Race bicolor x caffra. Cultivated. Seed.
- PI 560420 donor id: SA 1856. origin: South Africa. locality: Seshego, Lebowa. remarks: Race caffra. Cultivated. Seed.
- PI 560421 donor id: SA 1857. origin: South Africa. locality: Selogosese, Lebowa. remarks: Race caffra. Cultivated. Seed.
- PI 560422 donor id: SA 1858. origin: South Africa. locality: Selogosese, Lebowa. remarks: Race guinea. Cultivated. Seed.
- PI 560423 donor id: SA 1859. origin: South Africa. locality:
  Sekukhune, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560424 donor id: SA 1860. origin: South Africa. locality: Zwigodini, Venda. remarks: Race caffra. Cultivated. Seed.
- PI 560425 donor id: SA 1862. origin: South Africa. locality: Haakdoringdraai, Lebowa. remarks: Race caffra. Cultivated. Seed.
- PI 560426 donor id: SA 1863. origin: South Africa. locality:
  Sekukhune, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560427 donor id: SA 1864. origin: South Africa. locality:
  Masea, Venda. remarks: Race caffra. Cultivated. Seed.
- PI 560428 donor id: SA 1865. origin: South Africa. locality:
  Masea, Venda. remarks: Race candatum. Cultivated.
  Seed.

- PI 560429 donor id: SA 1866. origin: South Africa. locality: Seshego, Lebowa. remarks: Race caffra. Cultivated. Seed.
- PI 560430 donor id: SA 1867. origin: South Africa. locality: Selogosese, Lebowa. remarks: Race caffra. Cultivated. Seed.
- PI 560431 donor id: SA 1869. origin: South Africa. locality: Garside, Venda. remarks: Race caffra. Cultivated. Seed.
- PI 560432 donor id: SA 1870. origin: South Africa. remarks: Inseced. Cultivated. Seed.
- PI 560433 donor id: SA 1871. origin: South Africa. locality: Haakdoringdraai, Lebowa. remarks: Race caffra. Cultivated. Seed.
- PI 560434 donor id: SA 1872. origin: South Africa. locality:
  Masenghe, Venda. remarks: Race caffra x bicolor.
  Cultivated. Seed.
- PI 560435 donor id: SA 1873. origin: South Africa. locality:
  Thabanoopo, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560436 donor id: SA 1874. origin: South Africa. locality: Seshego, Lebowa. remarks: Race caffra. Cultivated. Seed.
- PI 560437 donor id: SA 1875. origin: South Africa. locality:
  Zwigodini, Venda. remarks: Race bicolor. Cultivated.
  Seed.
- PI 560438 donor id: SA 1876. origin: South Africa. locality:
  Zwigodini, Venda. remarks: Race bicolor. Cultivated.
  Seed.
- PI 560439 donor id: SA 1877. origin: South Africa. locality: Seshego, Lebowa. remarks: Race caffra. Cultivated. Seed.
- PI 560440 donor id: SA 1878. origin: South Africa. locality: Thabanoopo, Lebowa. remarks: Race caffra x bicolor. Cultivated. Seed.
- PI 560441 donor id: SA 1879. origin: South Africa. remarks: Race caffra x guinea. Cultivated. Seed.

- PI 560442 donor id: SA 1921. origin: South Africa. locality:
  Mokerong, Lebowa. remarks: Race caffra. Cultivated.
  Seed.
- PI 560443 donor id: 8-43. origin: South Africa. pedigree: Sel. from 129-3A (Kingmeng No. 3/IS-84). Breeding Material. Seed.
- PI 560444 donor id: 8-54. origin: South Africa. pedigree: Sel. from 129-3A (Kingmeng No. 3/IS-84). Breeding Material. Seed.
- PI 560445 **donor id:** 8-55. **origin:** South Africa. **pedigree:** Sel. from 129-3A (Kingmeng No. 3/IS-84). Breeding Material. Seed.
- PI 560446 donor id: 8-64. origin: South Africa. pedigree: Sel. from 129-3A (Kingmeng No. 3/IS-84). Breeding Material. Seed.
- PI 560447 donor id: 8-65. origin: South Africa. pedigree: Sel. from 129-3A (Kingmeng No. 3/IS-84). Breeding Material. Seed.
- PI 560448 donor id: 8-76. origin: South Africa. pedigree: Sel. from 129-3A (Kingmeng No. 3/IS-84). Breeding Material. Seed.
- PI 560449 donor id: 8-80. origin: South Africa. pedigree: Sel. from 129-3A (Kingmeng No. 3/IS-84). Breeding Material. Seed.
- PI 560450 donor id: SA 967. origin: South Africa. pedigree: S2-449-1/Bulk-4-2(B-line). Breeding Material. Seed.
- PI 560451 donor id: SA 1501. origin: South Africa. locality: Bophuthatswana. Cultivated. Seed.
- PI 560452 donor id: SA 1502. origin: South Africa. locality: Bophuthatswana. Cultivated. Seed.
- PI 560453 donor id: SA 1503. origin: South Africa. locality: Bophuthatswana. Cultivated. Seed.
- PI 560454 donor id: SA 1504. origin: South Africa. locality: Bophuthatswana. Cultivated. Seed.
- PI 560455 donor id: SA 1505. origin: South Africa. locality: Bophuthatswana. Cultivated. Seed.
- PI 560456 donor id: SA 1506. origin: South Africa. locality: Pretoria, BRI, ex Botswana. Cultivated. Seed.

- PI 560457 donor id: SA 1507. origin: South Africa. locality: Pretoria, BRI, ex Botswana. Cultivated. Seed.
- PI 560458 donor id: SA 1508. origin: South Africa. locality: Pretoria, BRI, ex Botswana. Cultivated. Seed.
- PI 560459 donor id: SA 1509. origin: South Africa. locality: Pretoria, BRI, ex Botswana. Cultivated. Seed.
- PI 560460 donor id: SA 1510. origin: South Africa. locality: Pretoria, BRI, ex Botswana. Cultivated. Seed.
- PI 560461 donor id: SA 1511. origin: South Africa. locality: Pretoria, BRI, ex Botswana. Cultivated. Seed.
- PI 560462 donor id: SA 1512. origin: South Africa. locality: Pretoria, BRI, ex Botswana. Cultivated. Seed.
- PI 560463 donor id: SA 1513. origin: South Africa. locality:
  Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560464 donor id: SA 1514. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560465 donor id: SA 1515. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560466 donor id: SA 1516. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560467 donor id: SA 1517. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560468 donor id: SA 1518. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560469 donor id: SA 1519. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560470 donor id: SA 1520. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560471 donor id: SA 1521. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560472 donor id: SA 1522. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560473 donor id: SA 1523. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.

- PI 560474 donor id: SA 1524. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560475 donor id: SA 1525. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560476 donor id: SA 1526. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560477 donor id: SA 1527. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560478 donor id: SA 1528. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560479 donor id: SA 1529. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560480 donor id: SA 1530. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560481 donor id: SA 1531. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560482 donor id: SA 1532. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560483 donor id: SA 1533. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560484 donor id: SA 1534. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560485 donor id: SA 1535. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560486 donor id: SA 1536. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560487 donor id: SA 1537. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560488 donor id: SA 1538. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560489 donor id: SA 1539. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560490 donor id: SA 1540. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.

#### PI 560343 to 560501-continued

- PI 560491 donor id: SA 1541. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560492 donor id: SA 1542. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560493 donor id: SA 1543. origin: South Africa. locality:
  Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560494 donor id: SA 1544. origin: South Africa. locality:
  Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560495 donor id: SA 1545. origin: South Africa. locality: Roodeplaat ex Bophuthatswana. Cultivated. Seed.
- PI 560496 donor id: SA 1546. origin: South Africa. locality: Roodeplaat ex Lebowa. Cultivated. Seed.
- PI 560497 donor id: SA 1547. origin: South Africa. locality: Roodeplaat ex Lebowa. Cultivated. Seed.
- PI 560498 donor id: SA 1548. origin: South Africa. locality: Roodeplaat ex Lebowa. Cultivated. Seed.
- PI 560499 donor id: SA 1549. origin: South Africa. locality: Roodeplaat ex Lebowa. Cultivated. Seed.
- PI 560500 donor id: SA 1550. origin: South Africa. locality: Roodeplaat ex Lebowa. Cultivated. Seed.
- PI 560501 donor id: SA 1551. origin: South Africa. locality: Roodeplaat ex Lebowa. Cultivated. Seed.

### PI 560502. Vicia ervilia (L.) Willd. FABACEAE

#### PI 560502-continued

donor id: TU86-16-03. origin: Turkey. local name:
Kusne. collected: July 09, 1986. collector: C.R.
Sperling, D. Eser, H.H. Gecit. collector id: TU86-16-03.
locality: Area of some scattered oak scrub and shallow agricultural valleys, soil reddish, Ekinduzu village,
22.5km W of Pervari on Pervari-Siirt road, Siirt
Province. latitude: 37 deg. 56 min. N. longitude: 42
deg. 21 min. E. elevation: 1450m. remarks: Harvested,
drying for threshing. Grown for animal feed with wheat
straw. Turkish "Burcok". Cultivated. Seed.

### PI 560503. Vicia villosa Roth FABACEAE

Donated by: Ankara University, Ankara, Turkey; and Sperling, C.R., Agricultural Research Service -- USDA, National Germplasm Services Lab., Rm. 329, Bldg. 001, BARC-West, Beltsville, Maryland 20705-2350, United States. remarks: A USDA sponsored collection in cooperation with Oregon State University and IBPGR. Received October 15, 1989.

donor id: TU86-38-03. origin: Turkey. local name: Gelerik. collected: July 17, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-38-03. locality: Cultivated winter wheat field in region of oak scrub forest, 2.3km W of Yuksekova-Semdinli road on road to Bembo village, Hakkari Province. latitude: 37 deg. 22 min. N. longitude: 44 deg. 30 min. E. elevation: 1540m. remarks: Flowers blue-violet. Common weed in field. Wheat planted in October, harvested in July. Both spring and winter wheat grown. Sperling Herbarium Voucher no. 6885. Wild. Seed.

# PI 560504. Vigna radiata (L.) R. Wilczek FABACEAE

#### PI 560504-continued

donor id: TU86-39-07. origin: Turkey. collected: July 18, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-39-07. locality: Open oak scrub forest region, Uzumci village, 29.6km S of Hakkari on Hakkari-Cukurca road, then 0.6km N on road to Baslik, Hakkari Province. latitude: 37 deg. 30 min. N. longitude: 43 deg. 36 min. E. elevation: 1170m. remarks: Collected from storage of 88 year old farmer. Seed black or green-black. Cooked with chickpeas (TU86-39-11). Reported to have been grown in this village for over 100 years. Cultivated. Seed.

## PI 560505. Vigna unguiculata (L.) Walp. FABACEAE

Donated by: Ankara University, Ankara, Turkey; and Sperling, C.R., Agricultural Research Service -- USDA, National Germplasm Services Lab., Rm. 329, Bldg. 001, BARC-West, Beltsville, Maryland 20705-2350, United States. remarks: A USDA sponsored collection in cooperation with Oregon State University and IBPGR. Received October 15, 1989.

donor id: TU86-39-06. origin: Turkey. collected: July 18, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-39-06. locality: Open oak scrub forest region, Uzumci village, 29.6km S of Hakkari on Hakkari-Cukurca road, then 0.6km N on road to Baslik, Hakkari Province. latitude: 37 deg. 30 min. N. longitude: 43 deg. 36 min. E. elevation: 1170m. remarks: Vigna? Phaseolus? Collected from storage of 88 year old farmer. Fresh fruits cooked in water, drained and eaten with salt. received as: Vigna sinensis. Cultivated. Seed.

# PI 560506 to 560507. Aegilops columnaris Zhuk. POACEAE

- PI 560506 donor id: TU85-005.5-02-2. origin: Turkey. collected:
  July 24, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-005.5-02. locality: Roadside
  along Lake Van, gravelly shore, very close to saline
  water. About 3km W of Ermisler, Van Province. latitude:
  38 deg. 52 min. N. longitude: 43 deg. 28 min. E.
  elevation: 1630m. remarks: Germplasm collected 24 July
  1985. Must be salt tolerant to grow in this location. Ae
  cylindrica was growing further from water that Ae.
  triuncialis. Salt tolerance. Originally collected in same
  sample with A. triuncialis (TU85-005.5-02-1). Wild.
  Seed.
- PI 560507 donor id: TU85-037-01. origin: Turkey. collected: July 23, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-037-01. locality: Gray soil of S slope on N side of small ravine in valley. About 2km N of village of Yalnizagac, Van Province. latitude: 38 deg. 42 min. N. longitude: 43 deg. 30 min. E. remarks: Not randomly sampled. Not found on adjacent red soils on S side of ravine. Wild. Seed.
- PI 560508 to 560522. Aegilops cylindrica Host POACEAE Jointed goatgrass

- PI 560508 donor id: TU85-011-01. origin: Turkey. collected: July 13, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-011-01. locality: On dirt roadside and margin of T. aestivum (Lancer wheat) field. Planted to wheat for several years. Floodplain area, fine soil, no rocks. Alpaslan Devleturetme Ciftlig (Alpaslan St. Ag. Farm) 13km E and N of hwy., Mus Province. latitude: 38 deg. 49 min. N. longitude: 41 deg. 35 min. E. elevation: 1260m. remarks: Growing at edge of road along field, but not in field. Random germplasm sample. Sperling Herbarium Voucher no. 6741. Wild. Seed.
- PI 560509 donor id: TU85-017-03. origin: Turkey. collected: July 15, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-017-03. locality: Open oak woods cultivated area. Growing around rocks in stoney soil. Grassy area, 15km E of Sirnak, Siirt Province. latitude: 37 deg. 29 min. N. longitude: 42 deg. 33 min. E. elevation: 1370m. Wild. Seed.

- PI 560510 donor id: TU85-018-01. origin: Turkey. collected: July 16, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-018-01. locality: Along road shoulder in legume meadow cut for hay. Fine grain soil, where extra water runs, 26km N of Hakkari, 12km on road to Doganci, Hakkari Province. latitude: 37 deg. 43 min. N. longitude: 43 deg. 48 min. E. elevation: 1780m. remarks: Cut for hay. Sperling Herbarium Voucher no. 6769. Wild. Seed.
- PI 560511 donor id: TU85-019-01. origin: Turkey. collected: July 17, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-019-01. locality: Sandy soil of steep bank and roadside, area of oak scrub on hillside. Altinsu, 4km N of Semdinli, Hakkari Province. latitude: 37 deg. 20 min. N. longitude: 44 deg. 33 min. E. elevation: 1440m. remarks: Seed white and grey, pubescent. Wild. Seed.
- PI 560512 donor id: TU85-025-02. origin: Turkey. collected: July 18, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-025-02. locality: Steep grazed bank, bare soil and wheat field margins, 1-2km NE of Durankaya village, (about 20km W of Hakkari on road to Beytussebap), Hakkari Province. latitude: 37 deg. 34 min. N. longitude: 43 deg. 38 min. E. elevation: 1780m. remarks: Random sample. Sperling Herbarium Voucher no. 6782. Wild. Seed.
- PI 560513 donor id: TU85-028-02. origin: Turkey. collected: July 19, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-028-02. locality: Common at edges of field and bare soil of hillside. Stony slope above Zap River, 5km S of jct road to Yuksekova or 39km N of Hakkari, Hakkari Province. latitude: 37 deg. 53 min. N. longitude: 44 deg. 02 min. E. elevation: 1530m. remarks: Many pubescent spikes in population, mixed with glabrous. Wild. Seed.
- PI 560514 donor id: TU85-034-01. origin: Turkey. collected: July 22, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-034-01. locality: Irrigated field, low ground along Lake Van, common at edge of wheat field, 2km NE of Yayliyaka, Van Province. latitude: 38 deg. 50 min. N. longitude: 43 deg. 24 min. E. elevation: 1625m. remarks: Sperling Herbarum Voucher no. 6798. Wild. Seed.

- PI 560515 donor id: TU85-035-03. origin: Turkey. collected: July 22, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-035-03. locality: Extensive stands of Aegilops in fallow fields and field margins. On gravelly and sandy soil, about 2km S of Halkali, Van Province. latitude: 38 deg. 49 min. N. longitude: 43 deg. 18 min. E. elevation: 1635m. remarks: Common. Found on disturbed soil and field margins. Sperling Herbarium Voucher no. 6714. Wild. Seed.
- PI 560516 donor id: TU85-037-02. origin: Turkey. collected: July 23, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-037-02. locality: Gray soil of small slope, on N side of small ravine in valley, 2km N of Kalnizugac, Van Province. latitude: 38 deg. 42 min. N. longitude: 43 deg. 30 min. E. remarks: Not randomly sampled. Not found on adjacent red soils on S side of ravine. Soil pH 7.70. Wild. Seed.
- PI 560517 donor id: TU85-045-03. origin: Turkey. collected: July 27, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-045-03. locality: Near cultivated field on disturbed clay soil, gentle N slope, 1 km W of Esendere, S side of Esendere River, Hakkari Province. latitude: 37 deg. 43 min. N. longitude: 44 deg. 36 min. E. elevation: 1700m. Wild. Seed.
- PI 560518 donor id: TU85-046-01. origin: Turkey. collected: July 27, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-046-01. locality: Disturbed soil near edge of wheat field, 11km W of Esendere, Hakkari Province. latitude: 37 deg. 43 min. N. longitude: 44 deg. 30 min. E. elevation: 1900m. Wild. Seed.
- PI 560519 donor id: TU85-048-06. origin: Turkey. collected: July 28, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-048-06. locality: Disturbed bare fine-grained soil on hillsides, near wheat fields, W side of road, 4km S of Hakkari-Van Province boundary on the Hakkari-Van road, Hakkari Province. latitude: 37 deg. 44 min. N. longitude: 44 deg. 05 min. E. elevation: 1750m. remarks: Not in wheat field. Wild. Seed.
- PI 560520 donor id: TU85-064-02. origin: Turkey. collected:
  August 3, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-064-02. locality: On road to
  Karahasan, 1.5km S of Malazgirt, Mus Province. latitude:
  39 deg. 08 min. N. longitude: 42 deg. 32 min. E.
  elevation: 1550m. remarks: Plants in weedy disturbed
  soil along roadside and edge of Cicer field. Occasional
  in Cicer field. Level ground between lava flows. Sperling
  Herbarium Voucher no. 6822. Wild. Seed.

### PI 560508 to 560522-continued

- PI 560521 donor id: TU85-077-02. origin: Turkey. collected:
  August 10, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-077-02. locality: Sandy soil,
  full sun, on edge of road, along oak forest on steep NW
  slope, 3.2km from Kavak on the road from Mutki, Bitlis
  Province. latitude: 38 deg. 28 min. N. longitude: 41
  deg. 50 min. E. elevation: 1460m. remarks: All mature,
  but not shattered. Wild. Seed.
- PI 560522 donor id: TU85-081-02. origin: Turkey. collected:
  August 12, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-081-02. locality: On road to
  Varto in disturbed soil in ungrazed cemetery and
  roadside, 4.4km N of Mus-Bingol hwy (#60), Serinova
  village, Mus Province. latitude: 38 deg. 54 min. N.
  longitude: 41 deg. 31 min. E. elevation: 1220m. Wild.
  Seed.
- PI 560523 to 560526. Aegilops neglecta Req. ex Bertol. POACEAE

- PI 560523 donor id: TU85-015-07. origin: Turkey. collected: July 15, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-015-07. locality: Rocky (limestone) field, 2km W of Eruh on S side of road, scrub oak region, Siirt Province. Occasional in bare soil areas at field edge. latitude: 37 deg. 45 min. N. longitude: 42 deg. 10 min. E. elevation: 1100m. remarks: Field is hand-sown wheat planted in October/November, harvested now. Seed white and grey. Wild. Seed.
- PI 560524 donor id: TU85-051-06. origin: Turkey. local name:
  Toslick. collected: July 30, 1985. collector: C.R.
  Sperling, D. Eser, H.H. Gecit. collector id:
  TU85-051-06. locality: On road to Tatvan from Van, steep grazed hillside, 9km W of the Van-Bitlis Province boundary, Bitlis Province. latitude: 38 deg. 23 min. N.
  longitude: 42 deg. 43 min. E. elevation: 1860m.
  remarks: Infrequent. Growing mixed with Aegilops triuncialis (TU85-051-05). Wild. Seed.

- PI 560525 donor id: TU85-073-02. origin: Turkey. collected:
  August 09, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-073-02. locality: Near
  cemetery, on steep rocky S slope, heavily grazed. Area of
  open Quercus scrub. About 6km S of Kuslu, Bitlis
  Province. latitude: 38 deg. 18 min. N. longitude: 42
  deg. 16 min. E. remarks: Plants common but less so than
  073-01. Associated species: Juglans, Quercus and
  Crataegus. Wild. Seed.
- PI 560526 donor id: TU85-074-02. origin: Turkey. collected:
  August 10, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-074-02. locality: Area of
  oak, Populus forest on S slope between semi-terraced
  fields. Thin soil over metamorphic rock. Much bare soil
  in grazed area. On road to Kavak, 1.6km NW of Mutki,
  Bitlis Province. latitude: 38 deg. 25 min. N.
  longitude: 41 deg. 55 min. E. elevation: 1340m.
  remarks: Plants common. Some Pyrus and Crataegus present.
  Wild. Seed.
- PI 560527 to 560528. Aegilops speltoides var. ligustica (Savign.) Fiori POACEAE

PI 560527 donor id: TU85-011-03. origin: Turkey. collected: July 13, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-011-03. locality: Alpaslan Devleturetme Cliftlig (Alpsalan St. Ag. Farm). Dirt roadside and edge of T. aestivum (Lancer wheat) field, 13km E and N of hwy. Flat floodplain, fine soil, Mus Province. latitude: 38 deg. 49 min. N. longitude: 41 deg. 35 min. E. elevation: 1260m. remarks: Dense, almost pure stands for 1 meter all along edge of wheat field. Plants at field edge mature earlier. Plants along road mature later. Redder than wheat. Sperling Herbarium Voucher no. 6743. Wild. Seed.

PI 560528 donor id: TU85-015-02-2. origin: Turkey. collector:

C.R. Sperling, D. Eser, H.H. Gecit. collector id:

TU85-015-02. locality: Rocky limestone wheat field. Oak scrub region. On S side of road, 2km W of Eruh, Siirt Province. latitude: 37 deg. 45 min. N. longitude: 42 deg. 10 min. E. elevation: 1100m. remarks: Random sample from area adjacent to field. Not found in field. Does well in dense grassy areas. Field is hand-sown wheat planted in Octoer, harvested in July. Originally collected in same sample with A. speltoides var. speltoides (TU85-015-02-1). Wild. Seed.

PI 560529 to 560531. Aegilops speltoides Tausch var. speltoides POACEAE

- PI 560529 donor id: TU85-008-01. origin: Turkey. collected: June 20, 1985. collector: C.R. Sperling, H.H. Gecit. collector id: TU85-008-01. locality: Fine soil near riverbank, grazed, at edge of Triticum field (hand-sown). S of Siirt, just over bridge on road to Eruh. N side of road. Billoris village area, Siirt Province. latitude: 37 deg. 49 min. N. longitude: 41 deg. 52 min. E. elevation: 560m. remarks: Common plant here. Sperling Herbarium Voucher no. 6720. Wild. Seed.
- PI 560530 donor id: TU85-014-01. origin: Turkey. collected: July 14, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-014-01. locality: Rocky basalt E facing slope, W side of road, 10km S of road jct. at Ziyaret (30km N of Siirt). Lower portion grazed. Siirt Province. latitude: 38 deg. 04 min. N. longitude: 41 deg. 47 min. E. elevation: 660-690m. remarks: Truncate glumes. Abundant and dominant on deeper soils on lower portion of slope. Dominant with TU85-014-03 (Glycyrrhiza) occurring together. Absent from mostly rocky areas. Associated with:Quercus, Ziziphus, Pistacia and Prunus. Sperling Herbarium Voucher no. 6757. Wild. Seed.

# PI 560529 to 560531-continued

PI 560531 donor id: TU85-015-02-1. origin: Turkey. collected:
July 15, 1985. collector: C.R. Sperling, D. Eser, H.H.
Gecit. collector id: TU85-015-02. locality: Rocky
limestone wheat field. Oak scrub region. On S side of
road, 2km W of Eruh, Siirt Province. latitude: 37 deg.
45 min. N. longitude: 42 deg. 10 min. E. elevation:
l100m. remarks: Random sample from area adjacent to
field. Not found in field. Does well in dense grassy
areas. Field is hand-sown wheat planted in
October/November, harvested in July. Originally collected
in same sample with A. speltoides var. ligustica
(TU85-015-02-2). Wild. Seed.

## PI 560532 to 560538. Aegilops tauschii Cosson POACEAE

- PI 560532 donor id: TU85-005-01. origin: Turkey. collected: July 23, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-005-01. locality: Weedy roadside and field margin. Sandy soil. Most fields here irrigated, 1 km W of Kasmoglu (9km E of asphalt road 95), Van Province. latitude: 38 deg. 41 min. N. longitude: 43 deg. 24 min. E. remarks: Occasional along roadside, but not field border. received as: A. squarrosa. Wild. Seed.
- PI 560533 donor id: TU85-005.5-01. origin: Turkey. collected:
  July 24, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-005.5-01. locality: Steep
  roadbank. Roadside along Lake Van, about 3km W of
  Ermisler, Van Province. latitude: 38 deg. 52 min. N.
  longitude: 43 deg. 28 min. E. elevation: 1630m.
  remarks: Ae cylindrica present. received as: A.
  squarrosa. Wild. Seed.

- PI 560534 donor id: TU85-007-01. origin: Turkey. collected: July 18, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-007-01. locality: Top of citadel hill in the town. Weed in disturbed soil around tree plantings, near walls and fences. Town of Hakkari, Hakkari Province. latitude: 37 deg. 35 min. N. longitude: 43 deg. 44 min. E. elevation: 1770m. remarks: Usually not in gravelly soil. Ae cylindrica here also, including some plants with pubescent spikes. Ae squarrosa, maturing earlier. Sperling Herbarium Voucher no. 6718. received as: A. squarrosa. Wild. Seed.
- PI 560535 donor id: TU85-018-02. origin: Turkey. collected: July 16, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-018-02. locality: Roadside meadow of many legume species, hayed, in fine soil where extra water collects, 26km N of Hakkari, then 12km W on road to Doganci, Hakkari Province. latitude: 37 deg. 43 min. N. longitude: 43 deg. 48 min. E. elevation: 1780m. remarks: Growing with legumes. Infrequent. Wild. Seed.
- PI 560536 donor id: TU85-034-03. origin: Turkey. collected: July 22, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-034-03. locality: Low ground, irrigated field, along Lake Van, 2km NE of Yayliyaka, Van Province. latitude: 38 deg. 50 min. N. longitude: 43 deg. 24 min. E. elevation: 1625m. remarks: Seed tan and brown. Edge of wheat field in fine soil, irrigated. With Ae cylindrica and also in shallow swale where water runs, silt accumulates. Most abundant there, but Ae cylindrica does not occur there. Soil pH 7.84. received as: A. squarrosa. Wild. Seed.
- PI 560537 donor id: TU85-035-01. origin: Turkey. collected: July 22, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-035-01. locality: Dry sandy soil at rocky field margins, 2km S of Halkali Village, Van Province. latitude: 38 deg. 49 min. N. longitude: 43 deg. 18 min. E. elevation: 1635m. remarks: Soil ph 7.90. received as: A. squarrosa. Wild. Seed.

PI 560538 donor id: TU85-052-01. origin: Turkey. collected: July 30, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-052-01. locality: Beneath near-vertical rock in grazed shrubby area with much fine-grained bare soil, steep (50%) N slope facing Lake Van, 1 km W of Koyluca on road from Van-Tatvan, Bitlis Province. latitude: 38 deg. 28 min. N. longitude: 42 deg. 30 min. E. elevation: 1670m. remarks: Found only at base of shrubs where animals do not trample or graze. Only in areas with extra shade and extra runoff water. Fine soil. Nearly all shattered now except for basal spikelet. received as: A. squarrosa. Wild. Seed.

PI 560539 to 560554. Aegilops triuncialis L. POACEAE Barb goatgrass

- PI 560539 donor id: TU85-005.5-02-1. origin: Turkey. collected:
  July 24, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-005.5-02. locality: Roadside
  along Lake Van, gravelly shore, very close to saline
  water. About 3km W of Ermisler, Van Province. latitude:
  38 deg. 52 min. N. longitude: 43 deg. 28 min. E.
  elevation: 1630m. remarks: Must be salt tolerant to
  grow in this location. Ae cylindrica was growing further
  from water than Ae triuncialis. Salt tolerance.
  Originally collected in same sample with A. columnaris
  (TU85-005.5-02-2). Wild. Seed.
- PI 560540 donor id: TU85-008-02. origin: Turkey. collected: June 20, 1985. collector: C.R. Sperling, H.H. Gecit. collector id: TU85-008-02. locality: At edge of Triticum field (hand-sown), fine soil near riverbank (grazed). Just over bridge on road to Eruh, N side of road, Billoris Village area, Siirt Province. latitude: 37 deg. 49 min. N. longitude: 41 deg. 52 min. E. elevation: 560m. remarks: Sperling Herbarium Voucher no. 6721. Wild. Seed.

- PI 560541 donor id: TU85-013-01. origin: Turkey. collected: July 14, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-013-01. locality: On westside along road, steep S facing slope of metamorphic scree in loose disturbed soil, 14km S of Bitlis, Bitlis Province. latitude: 38 deg. 20 min. N. longitude: 42 deg. 01 min. E. elevation: 1350m. remarks: Scattered Quercus and Ulmus. Grazed, much bare soil. Sperling Herbarium Voucher no. 6754. Wild. Seed.
- PI 560542 donor id: TU85-014-05. origin: Turkey. collecte: July 14, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-014-05. locality: On rocky basalt east facing slope, 10km S of junction at Ziyaret, 30km N of Siirt, W side of road. In heavily grazed area, Siirt Province. latitude: 38 deg. 04 min. N. longitude: 41 deg. 47 min. E. elevation: 660-690m. remarks: Associated plants: Quercus, much Ziziphus, one Pistacia, some Prunus. Wild. Seed.
- PI 560543 donor id: TU85-014-06. origin: Turkey. collected: July 14, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-014-06. locality: On rocky basalt east facing slope. Lower portion grazed. West side of road, 10km S of road jct. of Ziyaret (30km N of Siirt), Siirt Province. latitude: 38 deg. 04 min. N. longitude: 41 deg. 47 min. E. elevation: 660--690m. remarks: Spikes tapering to base. Heavily grazed area. Associated plants: Quercus, much Ziziphus, one Pistacia, some Prunus. Wild. Seed.
- PI 560544 donor id: TU85-015-04. origin: Turkey. collected: July 15, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-015-04. locality: Scrub oak region, rocky limestone, wheat field (hand-sown in October/November, now being harvested). On S side of road, 2km W of Eruh, Siirt Province. latitude: 37 deg. 45 min. N. longitude: 42 deg. 10 min. E. elevation: 1100m. remarks: Plants common in grassy areas at field edge, and in bare soil areas. Not as frequent in bare soil as grassy areas. Random sample from all areas. Wild. Seed.
- PI 560545 donor id: TU85-025-01. origin: Turkey. collected: July 18, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-025-01. locality: Grazed S slope, bare soil, also near wheat field, 1-2km NE of Durankaya village, about 20km W of Hakkari on road to Beytussebap, Hakkari Province. latitude: 37 deg. 34 min. N. longitude: 43 deg. 38 min. E. elevation: 1780m. remarks: Ramdon sample. Sperling Herbarium Voucher no. 6781. Wild. Seed.

- PI 560546 donor id: TU85-035-02. origin: Turkey. collected: July 22, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-035-02. locality: On gravelly and sandy soil, extensive stands of Aegilops, in fallow fields and margins, about 2km S of Halkali, Van Province. latitude: 38 deg. 49 min. N. longitude: 43 deg. 18 min. E. elevation: 1635m. remarks: In dirt areas between fields. Possibly mixed with other species. Sperling Herbarium Voucher no. 6716. Wild. Seed.
- PI 560547 donor id: TU85-045-04. origin: Turkey. collected: July 27, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-045-04. locality: On disturbed clay soil on gentle N slope, near irrigated cultivated field. 1 km W of Esendere, S side of Esendere River, Hakkari Province. latitude: 37 deg. 43 min. N. longitude: 44 deg. 36 min. E. elevation: 1700m. Wild. Seed.
- PI 560548 donor id: TU85-051-05. origin: Turkey. local name:
  Toslick. collected: July 30, 1985. collector: C.R.
  Sperling, D. Eser, H.H. Gecit. collector id:
  TU85-051-05. locality: Steep grazed hillside, bare and packed soil, 9km W of Van-Bitlis Province boundary, on road to Tatvan from Van, Bitlis Province. latitude: 38 deg. 23 min. N. longitude: 42 deg. 43 min. E. elevation: 1860m. remarks: Plants common here and near edge of field, but not in wheat field. Wild. Seed.
- PI 560549 donor id: TU85-052-02. origin: Turkey. collected: July 30, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-052-02. locality: Beneath near-vertical rock in grazed shrubby area, with much fine-grained bare soil. Steep (50 degree) N slope facing Lake Van, 1 km W of Koyluca on road from Van-Tatvan, Bitlis Province. latitude: 38 deg. 28 min. N. longitude: 42 deg. 30 min. E. elevation: 1670m. remarks: Plants common in heavily grazed areas. Usually near base of shrubs. Wild. Seed.
- PI 560550 donor id: TU85-053-04. origin: Turkey. collected: July 31, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-053-04. locality: Along roadside and invading margin of cultivated tir-sown wheat field between rows. Fine volcanic soil, rolling land, 1.5km E of Yenikopru, Bitlis Province. latitude: 38 deg. 44 min. N. longitude: 42 deg. 26 min. E. elevation: 1690m. remarks: Tillering extensively. Single plant observed with stolon-like tiller. Wild. Seed.

- PI 560551 donor id: TU85-056-02. origin: Turkey. collected:
  August 1, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-056-02. locality: Hard
  limestone-metamorphic rocks (not Basalt), grazed E slope,
  stoney soil, 15km W of Adilcevaz, Mus Province.
  latitude: 38 deg. 46 min. N. longitude: 42 deg. 36 min.
  E. elevation: 1670m. remarks: Plants taller than
  (TU85-056-01 & 056-03). Usually not pubescent. Not all
  spikes shed. Spikes mostly black. Associated plants are
  weedy Euphorbia, Eryngium and dominant cover of Aegilops
  species. Wild. Seed.
- PI 560552 donor id: TU85-059-01. origin: Turkey. collected:
  August 1, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-059-01. locality: Rocky S
  facing limestone slope, grazed, pebbly soil, 7km E of Van
  Bitlis Province boundary on road Tatvan Ercis, Van
  Province. latitude: 38 deg. 57 min. N. longitude: 43
  deg. 12 min. E. elevation: 1670m. remarks: Plants
  abundant. Dominant cover here. Nearly all spikes shed.
  Wild. Seed.
- PI 560553 donor id: TU85-073-01. origin: Turkey. collected:
  August 9, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-073-01. locality: Steep rocky
  S slope, heavily grazed. Near cemetery with Quercus,
  Juglans and Crataegus. Area of open Quercus scrub, 1.5km
  along asphalt road toward Tatvan, about 6km S of Kuslu,
  Bitlis Province. latitude: 38 deg. 18 min. N.
  longitude: 42 deg. 16 min. E. remarks: Plants common.
  Wild. Seed.
- PI 560554 donor id: TU85-074-01. origin: Turkey. collected:
  August 10, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-074-01. locality: Steep S
  slope in area between semi-terraced fields. Thin soil
  over metamorphic rock. Much bare soil in grazed area.
  Region of oak, Populus forest on slopes, 1.6km NW of
  Mutki, on road to Kavak, Bitlis Province. latitude: 38
  deg. 25 min. N. longitude: 41 deg. 55 min. E.
  elevation: 1340m. remarks: Plants common. Wild. Seed.
- PI 560555 to 560557. Aegilops umbellulata Zhuk. POACEAE Goatgrass

- PI 560555 donor id: TU85-009-02. origin: Turkey. collected: June 20, 1985. collector: C.R. Sperling, H.H. Gecit. collector id: TU85-009-02. locality: On road to Pervari, N facing slope in shallow (3m) ravine, next to field of Triticum. From Siirt 9km, Siirt Province. Steepe with coppiced shrubs Ziziphus, Quercus, Prunus. elevation: 1000m. remarks: Margin of field in eroded area. Infrequent. Wild. Seed.
- PI 560556 donor id: TU85-015-05. origin: Turkey. collected: July 15, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-015-05. locality: Oak scrub region, on rocky (limestone) field sown in October/November. Wheat hand sown, being harvested now, 2km W of Eruh on S side of road, Siirt Province. latitude: 37 deg. 45 min. N. longitude: 42 deg. 10 min. E. elevation: 1100m. remarks: Plants infrequent, only in bare soil at field edge. Wild. Seed.
- PI 560557 donor id: TU85-056-03. origin: Turkey. collected:
  August 01, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-056-03. locality: On grazed E
  slope, stoney soil. Weedy Euphorbs, Eryngium. Dominant
  cover is species of Aegilops. Hard limestone- metamorphic
  rocks, not basalt, 15km W of Adilcevaz, Mus Province.
  latitude: 38 deg. 46 min. N. longitude: 42 deg. 36 min.
  E. elevation: 1670m. remarks: Almost all spikes shed.
  Wild. Seed.
- PI 560558 to 560560. Hordeum vulgare subsp. spontaneum (K. Koch) Thell. POACEAE

PI 560558 donor id: TU85-008-04. origin: Turkey. collected: June 20, 1985. collector: C.R. Sperling, H.H. Gecit. collector id: TU85-008-04. locality: At edge of Triticum field (hand sown), fine soil near riverbank (grazed). North side of road, just over bridge on road to Eruh, S of Siirt, Billoris village area, Siirt Province. latitude: 37 deg. 49 min. N. longitude: 41 deg. 52 min. E. elevation: 560m. Wild. Seed.

- PI 560559 donor id: TU85-010-01. origin: Turkey. collected: June 20, 1985. collector: C.R. Sperling, H.H. Gecit. collector id: TU85-010-01. locality: Steep N facing slope, rocky, hard limestone conglomerate outcrops, heavily grazed with much bare ground. 4.2km W of jct roads Diyarbakr-Siirt and Siirt-Bitlis, Siirt Province. latitude: 37 deg. 58 min. N. longitude: 41 deg. 43 min. E. elevation: 880m. remarks: Plants occasional among rocks. Sperling Herbarium Voucher no. 6731. Wild. Seed.
- PI 560560 donor id: TU85-014-04. origin: Turkey. collected: July 14, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-014-04. locality: East facing slope, rocky basalt, lower portion grazed. West side of road, 10km S of road jct at Ziyaret (30km N of Siirt), Siirt Province. latitude: 38 deg. 04 min. N. longitude: 41 deg. 47 min. E. elevation: 660-690m. remarks: Plants occasional among rocks. Not in grazed area. Often growing next to rocks. Associated plants: Quercus, Ziziphus, Pistacia, Prunus. Wild. Seed.
- PI 560561 to 560564. Hordeum vulgare L. subsp. vulgare POACEAE Barley

- PI 560561 donor id: TU85-015-09. origin: Turkey. collected: July 15, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-015-09. locality: Oak scrub region. Rocky, limestone, wheat field, 2km W of Eruh, on S side of road, Siirt Province. latitude: 37 deg. 45 min. N. longitude: 42 deg. 10 min. E. elevation: 1100m. remarks: Wheat field sown in October/November, harvested July, hand sown. Two row barley, mixed rarely in wheat field. Cultivated. Seed.
- PI 560562 donor id: TU85-029-01. origin: Turkey. collected: July 19, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-029-01. locality: Stoney rolling terrain, sandy soil, 8km NE of Baskale on road to Van, Van Province. latitude: 38 deg. 04 min. N. longitude: 44 deg. 06 min. E. elevation: 2280m. remarks: Two-row barley. Spike white. Ready for harvesting. Irrigated field. Sperling Herbarium Voucher no. 6790. Cultivated. Seed.

### PI 560561 to 560564-continued

- PI 560563 donor id: TU85-031-03. origin: Turkey. collected: July 21, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-031-03. locality: Cultivated field, soil sandy, stoney, 24km from Van on road to Gevas on S side of road, Bakimli village, Van Province. latitude: 38 deg. 22 min. N. longitude: 43 deg. 12 min. E. elevation: 1650m. remarks: Not quite mature, but being harvested. Two-row barley. Spike tan. Cultivated. Seed.
- PI 560564 donor id: TU85-035-05. origin: Turkey. collected: July 22, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-035-05. locality: Cultivated field, dry sandy soil at field margin, 2km S of Halkali village, Van Province. latitude: 38 deg. 49 min. N. longitude: 43 deg. 18 min. E. elevation: 1635m. remarks: Hand sown, weedy field. Two-row barley. Spike white. Cultivated. Seed.
- PI 560565 to 560581. Secale cereale L. subsp. cereale POACEAE Rye

- PI 560565 donor id: TU85-012-01. origin: Turkey. collected: July 13, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-012-01. locality: Tir rye field along shore of Lake Van. Basalt soils. Basalt stones, fine soil. About 21km N of Tatvan, 2km S of Sarikum village, Bitlis Province. latitude: 38 deg. 37 min. N. longitude: 42 deg. 24 min. E. elevation: 1640m. remarks: Cultivated in rows. Tir sown (Press drill), 4-row machine. Row spacing about 15-18 inches. Spike white, mixed with TU85-012-02 (Secale). Sperling Herbarium Voucher no. 6747. Cultivated. Seed.
- PI 560566 donor id: TU85-012-02. origin: Turkey. collected: July 13, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-012-02. locality: Tir rye field along shore of Lake Van. Basalt soils, Basalt stones, fine soil. About 21km N of Tatvan, 2km S of Sarikum village, Bitlis Province. latitude: 38 deg. 37 min. N. longitude: 42 deg. 24 min. E. elevation: 1640m. remarks: Cultivated in rows. Tir sown (Press drill), 4-row machine. Row spacing about 15-18 inches. Spike brown, mixed with TU85-012-01 (Secale). Sperling Herbarium Voucher no. 6748. Cultivated. Seed.

- PI 560567 donor id: TU85-024-03-3. origin: Turkey. collected:
  July 18, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-024-03. locality: On road to
  Beytussebap, 21km from Hakkari, Durankaya village,
  Hakkari Province. latitude: 37 deg. 34 min. N.
  longitude: 43 deg. 37 min. E. elevation: 1760m.
  remarks: Grown for many years by farmer. Originally
  collected in same sample as Triticum aestivum
  (TU85-024-03-1 and TU85-024-03-2) as a bulk sample from a
  farmer's storage. Cultivated. Seed.
- PI 560568 donor id: TU85-036-02. origin: Turkey. collected: July 23, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-036-02. locality: Tir wheat field, tir sown. Clay soil, somewhat stoney. Just before road forks to Ilikaynak, 10km N of Ercek, Van Province. latitude: 38 deg. 43 min. N. longitude: 43 deg. 40 min. E. elevation: 1810m. remarks: Soil ph 8.00. White spikelet. 18% of wheat field. Growing mixed with rye (TU85-036-03) and wheat (TU85-036-01, 036-04 and 036-05). Cultivated. Seed.
- PI 560569 donor id: TU85-036-03. origin: Turkey. collected: July 23, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-036-03. locality: Tir wheat field, tir sown. Clay soil, somewhat stoney. Just before road forks to Ilikaynak, 10km N of Ercek, Van Province. latitude: 38 deg. 43 min. N. longitude: 43 deg. 40 min. E. elevation: 1810m. remarks: Soil pH 8.00. Spikelet brown. 10% of field. Growing mixed with rye (TU85-036-02) and wheat TU85-036-01, 036-04 and 036-05). Cultivated. Seed.
- PI 560570 donor id: TU85-038-02. origin: Turkey. collected: July 24, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-038-02. locality: Tir wheat field, rye is a contaminant. Level land, 5km NW Ercis, than 3.5km N on the road to Kockopru, Van Province. latitude: 39 deg. 05 min. N. longitude: 43 deg. 20 min. E. elevation: 1700m. remarks: Soil pH 7.90. Spike white. Common contaminant. Cultivated. Seed.
- PI 560571 donor id: TU85-038-03. origin: Turkey. collected: July 24, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-038-03. locality: Tir wheat field, rye is a contaminant. Level land, 5km NW Ercis, than 3.5km N on the road to Kockopru, Van Province. latitude: 39 deg. 05 min. N. longitude: 43 deg. 20 min. E. elevation: 1700m. remarks: Soil pH 7.90. Spike brown. Common contaminant. Cultivated. Seed.

- PI 560572 donor id: TU85-042-01. origin: Turkey. collected: July 25, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-042-01. locality: Field of cultivated rye, 8km SW of Caldiran on road to Muradiye, Van Province. latitude: 39 deg. 06 min. N. longitude: 43 deg. 51 min. E. elevation: 1990m. remarks: Soil pH 7.04. Spikes red-brown at maturity. Few fields of rye in this region. Field very weedy, hand-sown. Cultivated. Seed.
- PI 560573 donor id: TU85-042-02. origin: Turkey. collected: July 25, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-042-02. locality: Field of cultivated rye, 8km SW of Caldiran on road to Muradiye, Van Province. latitude: 39 deg. 06 min. N. longitude: 43 deg. 51 min. E. elevation: 1990m. remarks: Soil pH 7.04. Spikes white at maturity. Few fields of rye in this region. Field very weedy hand sown. Cultivated. Seed.
- PI 560574 donor id: TU85-044-01. origin: Turkey. collected: July 25, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-044-01. locality: Irrigated wheat field on gentle S slope, 15km W of Ozalp on the road to Van, Van Province. latitude: 38 deg. 40 min. N. longitude: 43 deg. 53 min. E. elevation: 1920m. remarks: Soil pH 8.05. Spikes white at maturity. Hand-sown field of several types of wheat with some contaminant rye. 10% of field. Sperling Herbarium Voucher no. 6810. Cultivated. Seed.
- PI 560575 donor id: TU85-044-02. origin: Turkey. collected: July 25, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-044-02. locality: Irrigated wheat field on gently S slope, 15km W of Ozalp on the road to Van, Van Province. latitude: 38 deg. 40 min. N. longitude: 43 deg. 53 min. E. elevation: 1920m. remarks: Soil pH 8.05. Spikes brown at maturity. Hand-sown field of several types of wheat with some contaminant rye. Less than 5% of field. Sperling Herbarium Voucher no. 6811. Cultivated. Seed.
- PI 560576 donor id: TU85-051-03. origin: Turkey. collected: July 30, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-051-03. locality: Cultivated field on slight E slope, stoney soil, 9km W of Van-Bitlis province boundary on the road to Tatvan from Van, Van Province. latitude: 38 deg. 23 min. N. longitude: 42 deg. 43 min. E. elevation: 1860m. remarks: Soil pH 7.60. 10% of wheat field. Growing mixed with TU85-051-04 and wheat (051-01 and 051-02). Rye is a contaminant. Spikes white. Hand-sown in October, harvested July. Cultivated. Seed.

- PI 560577 donor id: TU85-051-04. origin: Turkey. collected: July 30, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-051-04. locality: Cultivated field on slight E slope, stoney soil, 9km W of Van-Bitlis province boundary on the road to Tatvan from Van, Van Province. latitude: 38 deg. 23 min. N. longitude: 42 deg. 43 min. E. elevation: 1860m. remarks: Soil pH 7.60. 10% of wheat field. Growing mixed with TU85-051-03 and wheat (051-01 and 051-02). Rye is a contaminant. Spikes tan. Hand sown in October, harvested July. Cultivated. Seed.
- PI 560578 donor id: TU85-054-04. origin: Turkey. collected: July 31, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-054-04. locality: Cultivated field of T. durum planted with Tir planter, rolling land, 7km SE of Ovakisla, Bitlis Province. latitude: 38 deg. 46 min. N. longitude: 42 deg. 22 min. E. elevation: 1770m. remarks: Soil pH 7.60. 4% of wheat field. Growing mixed with TU85-054-05, wheat (054-01 and 054-02) and T. aestivum (054-03 and 054-06). Spikes brown. T. aestivum and rye are contaminants in field. Fine grained soil. Only field of T. durum seen here; may have been fertilized. Cultivated. Seed.
- PI 560579 donor id: TU85-054-05. origin: Turkey. collected: July 31, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-054-05. locality: Cultivated field of T. durum planted with Tir planter, rolling land, 7km SE of Ovakisla, Bitlis Province. latitude: 38 deg. 46 min. N. longitude: 42 deg. 22 min. E. elevation: 1770m. remarks: Spike white. 3% of field. Growing mixed with TU85-054-04, wheat (054-01 and 054-02) and T. aestivum (054-03 and 054-06). T. aestivum and rye are contaminants in field. Fine grained soil. Only field of T. durum seen here; may have been fertilized. Cultivated. Seed.
- PI 560580 donor id: TU85-078-04-1. origin: Turkey. collected:
  August 10, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-078-04. locality: Large
  threshing pile in village from one field, Kavak village,
  Bitlis Province. latitude: 38 deg. 29 min. N.
  longitude: 41 deg. 49 min. E. elevation: 1330m.
  remarks: Irrigated field. Planted in October. Growing
  mixed with wheat (TU85-078-01, 078-02 and 078-03). Spike
  white. Originally collected in same sample with
  TU85-078-04-2. Cultivated. Seed.

PI 560581 donor id: TU85-078-04-2. origin: Turkey. collected:
August 10, 1985. collector: C.R. Sperling, D. Eser, H.H.
Gecit. collector id: TU85-078-04. locality: Large
threshing pile in village from one field, Kavak village,
Bitlis Province. latitude: 38 deg. 29 min. N.
longitude: 41 deg. 49 min. E. elevation: 1330m.
remarks: Irrigated field. Planted in October. Growing
mixed with wheat (TU85-078-01, 078-02 and 078-03). Spike
brown. Originally collected in same sample with
TU85-078-04-1. Cultivated. Seed.

PI 560582 to 560696. Triticum aestivum L., nom. cons. POACEAE Common wheat

- PI 560582 donor id: TU85-008-09. origin: Turkey. collected: June 20, 1985. collector: C.R. Sperling, H.H. Gecit. collector id: TU85-008-09. locality: Cultivated Triticum field, hand sown. Fine soil near riverbank, grazed. South of Siirt. Just over bridge on road to Eruh, north side of road. Billoris village area. Siirt Province. latitude: 37 deg. 49 min. N. longitude: 41 deg. 52 min. E. elevation: 560m. remarks: Comprising about 5% of the wheat in this mixed field. Growing mixed with TU85-008-11 and T. durum (TU85-008-07, 008-08, 008-10, 008-12, and 008-13). Seed red, awned, awns tan. Glumes tan, glabrous. Cultivated. Seed.
- PI 560583 donor id: TU85-008-11. origin: Turkey. collected: June 20, 1985. collector: C.R. Sperling, H.H. Gecit. collector id: TU85-008-11. locality: Cultivated Triticum field, hand sown. Fine soil near riverbank, grazed. South of Siirt. Just over bridge on road to Eruh, north side of road. Billoris village area, Siirt Province. latitude: 37 deg. 49 min. N. longitude: 41 deg. 52 min. E. elevation: 560m. remarks: White spike, comprising 5% of wheat in this mixed field. Growing mixed with TU85-008-09 and T. durum (TU85-008-07, 008-08, 008-10, 008-12, and 008-13). Cultivated. Seed.

- PI 560584 donor id: TU85-011-05. origin: Turkey. collected: July 13, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-011-05. locality: Dirt roadside and margin of T. aestivum (Lancer wheat) field. Flat floodplain, fine soil. Alpaslan Devleturetme Ciftlig (Alpaslan St. Ag. Farm), 13km E and N of hwy, Mus Province. latitude: 38 deg. 49 min. N. longitude: 41 deg. 35 min. E. elevation: 1260m. remarks: Found as an uncommon plant in this field. Seed red, awned. Glumes black and white, non-pubescent. Sperling Herbarium Voucher no. 6746. Cultivated. Seed.
- PI 560585 donor id: TU85-012-03. origin: Turkey. collected: July 13, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-012-03. locality: Tir wheat field-shore of Lake Van. Basalt soils and stones in fine soil. About 21km N of Tatvan, 2km S of Sarikum village, Bitlis Province. latitude: 38 deg. 37 min. N. longitude: 42 deg. 24 min. E. elevation: 1640m. remarks: Seed white, awned, awns brown. Glumes brown, non-pubescent. Growing mixed with TU85-012-04, 012-05 and 012-06. Sperling Herbarium Voucher no. 6749. Cultivated. Seed.
- PI 560586 donor id: TU85-012-04. origin: Turkey. collected: July 13, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-012-04. locality: Tir wheat field-shore of Lake Van. Basalt soils and stones in fine soil. About 21km N of Tatvan, 2km S of Sarikum village, Bitlis Province. latitude: 38 deg. 37 min. N. longitude: 42 deg. 24 min. E. elevation: 1640m. remarks: Seed white, awned, awns brown. Glumes brown, pubescent. Growing mixed with TU85-012-03, 012-05 and 012-06. Sperling Herbarium Voucher no. 6750. Cultivated. Seed.
- PI 560587 donor id: TU85-012-05-1. origin: Turkey. collected:
  July 13, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-012-05. locality: Tir wheat
  field-shore of Lake Van. Basalt soils and stones in fine
  soil. About 21km N of Tatvan, 2km S of Sarikum village,
  Bitlis Province. latitude: 38 deg. 37 min. N.
  longitude: 42 deg. 24 min. E. elevation: 1640m.
  remarks: Seed red, awned, awns grey. Glumes grey,
  pubescent. Originally collected in same sample as
  TU85-012-05-2. Growing mixed with TU85-012-03, 012-04 and
  012-06. Sperling Herbarium Voucher no. 6751. Cultivated.
  Seed.

- PI 560588

  donor id: TU85-012-05-2. origin: Turkey. collected:
  July 13, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-012-05. locality: Tir wheat
  field-shore of Lake Van. Basalt soils and stones in fine
  soil. About 21km N of Tatvan, 2km S of Sarikum village,
  Bitlis Province. latitude: 38 deg. 37 min. N.
  longitude: 42 deg. 24 min. E. elevation: 1640m.
  remarks: Seed white, awned, awns grey. Glumes grey,
  pubescent. Originally collected in same sample as
  TU85-012-05-1. Growing mixed with TU85-012-03, 012-04 and
  012-06. Sperling Herbarium Voucher no. 6751. Cultivated.
  Seed.
- PI 560589 donor id: TU85-012-06. origin: Turkey. collected: July 13, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-012-06. locality: Tir wheat field-shore of Lake Van. Basalt soils and stones in fine soil. About 21km N of Tatvan, 2km S of Sarikum village, Bitlis Province. latitude: 38 deg. 37 min. N. longitude: 42 deg. 24 min. E. elevation: 1640m. remarks: Seed white, awned, awns white. Glumes white, pubescent. Growing mixed with TU85-012-03, 012-04 and 012-05. Sperling Herbarium Voucher no. 6752. Cultivated. Seed.
- PI 560590 donor id: TU85-015-01-5. origin: Turkey. collected:
  July 15, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-015-01. locality: Oak scrub
  region. Wheat field hand sown. Rocky, limestone, field,
  2km W of Eruh on S side of road, Siirt Province.
  latitude: 37 deg. 45 min. N. longitude: 42 deg. 10 min.
  E. elevation: 1100m. remarks: Sown in October/November,
  harvested in July. Seed red, awned, awns white. Glumes
  white and non-pubescent. Originally collected in a random
  sample also including TU85-015-01-4, TU85-015-01-6 and
  Triticum durum (TU85-015-01-1, TU85-015-01-2 and
  TU85-015-01-3). Cultivated. Seed.
- PI 560591 donor id: TU85-015-01-6. origin: Turkey. collected:
  July 15, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-015-01. locality: Oak shrub
  region. Wheat field hand-sown. Rocky, limestone, field,
  2km W of Eruh on S side of road, Siirt Province.
  latitude: 37 deg. 45 min. N. longitude: 42 deg. 10 min.
  E. elevation: 1100m. remarks: Sown in October/November,
  harvested in July. Seed white. Originally collected in a
  random sample also including TU85-015-01-4, TU85-015-01-5
  and Triticum durum (TU85-015-01-1, TU85-015-01-2 and
  TU85-015-01-3). Cultivated. Seed.

- DI 560592 donor id: TU85-017-01-2. origin: Turkey. collected:
  July 15, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-017-01. locality: Collected
  from threshing pile of mixed varieties before threshing.
  Open oak wood area, 15km E of Sirnak, Siirt Province.
  latitude: 37 deg. 29 min. N. longitude: 42 deg. 33 min.
  E. elevation: 1370m. remarks: Seed white, awned, awns
  black. Glumes black, pubescent. Originally collected in
  same sample as TU85-017-01-1, TU85-017-01-4,
  TU85-017-01-11 and T. durum (TU85-017-01-3,
  TU85-017-01-5, TU85-017-01-6, TU85-017-01-7,
  TU85-013-01-8, TU85-017-01-9, TU85-017-01-10).
  Cultivated. Seed.
- DI 560593 donor id: TU85-017-01-4. origin: Turkey. collected:
  July 15, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-017-01. locality: Collected
  from threshing pile of mixed varieties before threshing.
  Open oak wood area, 15km E of Sirnak, Siirt Province.
  latitude: 37 deg. 29 min. N. longitude: 42 deg. 33 min.
  E. elevation: 1370m. remarks: Seed white, short-awned,
  awns black and white. Glumes black and white, pubescent.
  Originally collected in same sample as TU85-017-01-1,
  TU85-017-01-2, and TU85-017-01-11 and T. durum
  (TU85-017-01-3, TU85-017-01-5, TU85-017-01-6,
  TU85-017-01-7, TU85-017-01-8, TU85-017-01-9,
  TU85-017-01-10). Cultivated. Seed.
- PI 560594 donor id: TU85-017-01-11. origin: Turkey. collected:
  July 15, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-017-01. locality: Collected from threshing pile of mixed varieties before threshing.
  Open oak wood area, 15km E of Sirnak, Siirt Province.
  latitude: 37 deg. 29 min. N. longitude: 42 deg. 33 min.
  E. elevation: 1370m. remarks: Seed white, awnletted, awns black and white. Glumes white with black edges and pubescent. Originally collected in same sample as TU85-017-01-1, TU85-017-01-2, and TU85-017-01-4 and T. durum (TU85-017-01-3, TU85-017-01-5, TU85-017-01-6, TU85-017-01-7, TU85-017-01-8, TU85-017-01-9 and TU85-017-01-10). Cultivated. Seed.

- PI 560595 donor id: TU85-020-01-1. origin: Turkey. collected:
  July 17, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-020-01. locality: Wheat
  fields, S slope, 4km S of Semdinli, Gunyazi village,
  Hakkari Province. latitude: 37 deg. 17 min. N.
  longitude: 44 deg. 36 min. E. elevation: 1430m.
  remarks: Germplasm from threshing pile. Wheat grown on S
  slope, sown September/October, harvested mid July. Seed
  white, awns white. Glumes white, non-pubescent.
  Originally collected in same sample as TU85-020-01-2.
  Cultivated. Seed.
- PI 560596 donor id: TU85-020-01-2. origin: Turkey. collected:
  July 17, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-020-01. locality: Wheat
  fields, S slope, 4km S of Semdinli, Gunyazi village,
  Hakkari Province. latitude: 37 deg. 17 min. N.
  longitude: 44 deg. 36 min. E. elevation: 1430m.
  remarks: Germplasm from threshing pile. Wheat grown on S
  slope, sown September/October, harvested mid July. Seed
  red, awns white. Glumes white, non-pubescent. Originally
  collected in same sample as TU85-020-01-1. Cultivated.
  Seed.
- PI 560597 donor id: TU85-020-02. origin: Turkey. collected: July 17, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-020-02. locality: Wheat fields, S slope, 4km S of Semdinli, Gunyazi village, Hakkari Province. latitude: 37 deg. 17 min. N. longitude: 44 deg. 36 min. E. elevation: 1430m. remarks: Germplasm from threshing pile. Wheat grown on S slope, sown September/October, harvested mid July. Seed amber, awned, awns white and black. Glumes white, pubescent. Cultivated. Seed.
- PI 560598 donor id: TU85-020-03. origin: Turkey. collected: July 17, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-020-03. locality: Wheat fields, S slope, 4km S of Semdinli, Gunyazi village, Hakkari Province. latitude: 37 deg. 17 min. N. longitude: 44 deg. 36 min. E. elevation: 1430m. remarks: Germplasm from threshing pile. Wheat grown on S slope, sown September/October, harvested mid July. Seed red, awned, awns brown. Glumes brown, non-pubescent. Cultivated. Seed.

- PI 560599 donor id: TU85-024-03-1. origin: Turkey. collected:
  July 18, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-024-03. locality: On road to
  Beytussebap, 21km from Hakkari, Durankaya village,
  Hakkari Province. latitude: 37 deg. 34 min. N.
  longitude: 43 deg. 37 min. E. elevation: 1760m.
  remarks: Grown for many years by farmer. Seed white.
  Originally collected in same sample as TU85-024-03-2 and
  rye (TU85-024-03-3) as a bulk sample from a farmer's
  storage. Cultivated. Seed.
- PI 560600 donor id: TU85-024-03-2. origin: Turkey. collected:
  July 18, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-024-03. locality: On road to
  Beytussebap, 21km from Hakkari, Durankaya village,
  Hakkari Province. latitude: 37 deg. 34 min. N.
  longitude: 43 deg. 37 min. E. elevation: 1760m.
  remarks: Grown for many years by farmer. Seed red.
  Originally collected in same sample as Tu85-024-03-1 and
  rye (TU85-024-03-3) as a bulk sample from a farmer's
  storage. Cultivated. Seed.
- PI 560601 donor id: TU85-025-04. origin: Turkey. collected: July 18, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-025-04. locality: Triticum field, irrigated, steep S slope, about 20km W of Hakkari on road to Beytussebap, 1-2km NE of Durankaga village, Hakkari Province. latitude: 37 deg. 34 min. N. longitude: 43 deg. 38 min. E. elevation: 1780m. remarks: Growing mixed with TU85-025-03 and 025-06. Seed red, awned, awns white. Glumes white, non-pubescent. Cultivated. Seed.
- PI 560602 donor id: TU85-025-06-1. origin: Turkey. collected:
  July 18, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-025-06. locality: Triticum
  field, irrigated, steep S slope, about 20km W of Hakkari
  on road to Beytussebap, 1-2km NE of Durankaga village,
  Hakkari Province. latitude: 37 deg. 34 min. N.
  longitude: 43 deg. 38 min. E. elevation: 1780m.
  remarks: Occasional in field. Growing mixed with
  TU85-025-03 and 025-04. Seed white, awned, awns brown.
  Glumes brown, non-pubescent. Originally collected in same
  sample as TU85-025-06-2. Cultivated. Seed.

- PI 560603 donor id: TU85-025-06-2. origin: Turkey. collected:
  July 18, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-025-06. locality: Triticum
  field, irrigated, steep S slope, about 20km W of Hakkari
  on road to Beytussebap, 1-2km NE of Durankaya village,
  Hakkari Province. latitude: 37 deg. 34 min. N.
  longitude: 43 deg. 38 min. E. elevation: 1780m.
  remarks: Occasional in field. Growing mixed with
  TU85-025-03 and 025-04. Seed red, awned, awns brown.
  Glumes brown, non-pubescent. Originally collected in same
  sample as TU85-025-06-1. Cultivated. Seed.
- PI 560604 donor id: TU85-027-01-1. origin: Turkey. collected:
  July 18, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-027-01. locality: Level
  ground of terraced field, irrigated. About 19km W of
  Hakkari on road to Beytussebap, Caylica village (4km from
  Durankaya), Hakkari Province. latitude: 37 deg. 43 min.
  N. longitude: 43 deg. 39 min. E. elevation: 2040m.
  remarks: Badly lodged. Seed red, awned, awns brown.
  Glumes brown, non-pubescent. Spikes compact. Originally
  collected in a random sample also including
  TU85-027-01-2. Sperling Herbarium Voucher no. 6786.
  Cultivated. Seed.
- PI 560605 donor id: TU85-027-01-2. origin: Turkey. collected:
  July 18, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-027-01. locality: Level
  ground of terraced field, irrigated. About 19km W of
  Hakkari on road to Beytussebap, Caylica village (4km from
  Durankaya), Hakkari Province. latitude: 37 deg. 43 min.
  N. longitude: 43 deg. 39 min. E. elevation: 2040m.
  remarks: Badly lodged. Seed white, awned, awns brown.
  Glumes brown, non-pubescent. Spikes compact. Originally
  collected in a random sample also including
  TU85-027-01-1. Cultivated. Seed.
- PI 560606

  donor id: TU85-028-04. origin: Turkey. collected: July 19, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-028-04. locality: Cultivated field, stoney slope above Zap River. Road to Yuksekova, 5km S of jct, or 39km N of Hakkari, Hakkari Province. latitude: 37 deg. 53 min. N. longitude: 44 deg. 02 min. E. elevation: 1530m. remarks: 80% of field growing mixed with TU85-028-05 and 028-06. Seed white, awnletted, awnlets tan. Glumes tan, pubescent. Cultivated. Seed.

- PI 560607 donor id: TU85-028-05. origin: Turkey. collected: July 19, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-028-05. locality: Cultivated field, stoney slope above Zap River. Road to Yuksekova, 5km S of jct, or 39km N of Hakkari, Hakkari Province. latitude: 37 deg. 53 min. N. longitude: 44 deg. 02 min. E. elevation: 1530m. remarks: 10% of field growing mixed with TU85-028-04 and 028-06. Seed white, awnletted, awnlets white. Glumes white, non-pubescent. Cultivated. Seed.
- PI 560608 donor id: TU85-028-06-1. origin: Turkey. collected:
  July 19, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-028-06. locality: Cultivated field, stoney slope above Zap River. Road to Yuksekova, 5km S of jct, or 39km N of Hakkari, Hakkari Province.
  latitude: 37 deg. 53 min. N. longitude: 44 deg. 02 min.
  E. elevation: 1530m. remarks: Growing mixed with TU85-028-04 and 028-05. Seed red, awned, awns white.
  Glumes white, non-pubescent. Originally collected in same sample as TU85-028-06-2 -- the two types together comprising 10% of field. Cultivated. Seed.
- PI 560609 donor id: TU85-028-06-2. origin: Turkey. collected:
  July 19, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-028-06. locality: Cultivated
  field, stoney slope above Zap river. Road to Yuksekova,
  5km S of jct, or 39km N of Hakkari, Hakkari Province.
  latitude: 37 deg. 53 min. N. longitude: 44 deg. 02 min.
  E. elevation: 1530m. remarks: Growing mixed with
  TU85-028-04 and 028-05. Seed white, awned, awns white.
  Glumes white, non-pubescent. Originally collected in same
  sample as TU85-028-06-1 -- the two types together
  comprising 10% of field. Cultivated. Seed.
- PI 560610 donor id: TU85-031-01-1. origin: Turkey. collected:
  July 21, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-031-01. locality: Cultivated tir wheat field. Soil sandy, stoney. On road to Gevas on S side of road, 24km from Van, Bakimli village, Van Province. latitude: 38 deg. 22 min. N. longitude: 43 deg. 12 min. E. elevation: 1650m. remarks: Soil pH 8.21. Winter sown. Seed white, short, awned, awns white and black. Glumes white and black, pubescent. Originally collected in same sample as TU85-031-01-2. Cultivated. Seed.

- PI 560611 donor id: TU85-031-01-2. origin: Turkey. collected:
  July 21, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-031-01. locality: Cultivated
  tir wheat field. Soil sandy, stoney. On road to Gevas on
  S side of road, 24km from Van, Bakimli village, Van
  Province. latitude: 38 deg. 22 min. N. longitude: 43
  deg. 12 min. E. elevation: 1650m. remarks: Soil pH
  8.21. Winter sown. Seed red, short, awned, awns white and
  black. Glumes white and black, pubescent. Originally
  collected in same sample as TU85-031-01-1. Cultivated.
  Seed.
- PI 560612 donor id: TU85-032-02. origin: Turkey. collected: July 21, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-032-02. locality: Cultivated field, 1 km S of road on side road to Ikizler, Van Province. latitude: 38 deg. 18 min. N. longitude: 42 deg. 59 min. E. remarks: Soil pH 8.20. Grown with TU85-032-03 and 032-04. Seed red, awned, awns white. Glumes white, non-pubescent. Cultivated. Seed.
- PI 560613 donor id: TU85-032-03. origin: Turkey. collected: July 21, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-032-03. locality: Cultivated field, 1 km S of road on side road to Ikizler, Van Province. latitude: 38 deg. 18 min. N. longitude: 42 deg. 59 min. E. remarks: Grown with TU85-032-02 and 032-04. Seed red, awned, awns white. Glumes white, non-pubescent. Cultivated. Seed.
- PI 560614 donor id: TU85-032-04. origin: Turkey. collected: July 21, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-032-04. locality: Cultivated field, 1 km S of road on side road to Ikizler, Van Province. latitude: 38 deg. 18 min. N. longitude: 42 deg. 59 min. E. remarks: Spikes pubescent red, no awns. Kerick wheat. Grown with TU85-032-03 and 032-02. Seed white, awnletted, awnlets tan. Glumes tan, pubescent. Cultivated. Seed.
- PI 560615

  donor id: TU85-033-01-1. origin: Turkey. collected:
  July 22, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-033-01. locality: Tir wheat
  field, stoney volcanic soil. East side of road, 25km N of
  Van, Van Province. latitude: 38 deg. 42 min. N.
  longitude: 43 deg. 20 min. E. elevation: 1720m.
  remarks: Wheat planted in rows, being harvested now.
  Growing with TU85-033-02 and 033-03. Soil pH 7.5. Seed
  red, awned, awns brown. Glumes brown, pubescent.
  Originally collected in a random sample also including
  TU85-033-01-2. Cultivated. Seed.

- PI 560616 donor id: TU85-033-01-2. origin: Turkey. collected:
  July 22, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-033-01. locality: Tir wheat
  field, stoney volcanic soil. East side of road, 25km N of
  Van, Van Province. latitude: 38 deg. 42 min. N.
  longitude: 43 deg. 20 min. E. elevation: 1720m.
  remarks: Wheat planted in rows, being harvested now.
  Growing with TU85-033-02 and 033-03. Soil pH 7.5. Seed
  white, awned, awns brown. Glumes brown, pubescent.
  Originally collected in a random sample also including
  TU85-033-01-1. Cultivated. Seed.
- PI 560617 donor id: TU85-033-02-1. origin: Turkey. collected:
  July 22, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-033-02. locality: Tir wheat
  field, stoney volcanic soil. East side of road, 25km N of
  Van, Van Province. latitude: 38 deg. 42 min. N.
  longitude: 43 deg. 20 min. E. elevation: 1720m.
  remarks: Wheat planted in rows, being harvested now.
  Growing with TU85-033-01 and 033-03. Soil pH 7.95. Seed
  white, awned, awns white. Glumes white, pubescent.
  Originally collected in same sample as TU85-033-02-2.
  Cultivated. Seed.
- PI 560618 donor id: TU85-033-02-2. origin: Turkey. collected:
  July 22, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-033-02. locality: Tir wheat
  field, stoney volcanic soil. East side of road, 25km N of
  Van, Van Province. latitude: 38 deg. 42 min. N.
  longitude: 43 deg. 20 min. E. elevation: 1720m.
  remarks: Wheat planted in rows, being harvested now.
  Growing with TU85-033-01 and 033-03. Soil pH 7.95. Seed
  red, awned, awns white. Glumes white, glabrous.
  Originally collected in same sample as TU85-033-02-1.
  Cultivated. Seed.
- PI 560619 donor id: TU85-033-03-1. origin: Turkey. collected:
  July 22, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-033-03. locality: Tir wheat
  field, stoney volcanic soil. East side of road, 25km N of
  Van, Van Province. latitude: 38 deg. 42 min. N.
  longitude: 43 deg. 20 min. E. elevation: 1720m.
  remarks: Wheat planted in rows, being harvested now.
  Growing with TU85-033-01 and 033-02. Soil pH 7.95. Seed
  white, awned, awns purple. Glumes purple, pubescent.
  Originally collected in same sample as TU85-033-03-2.
  Cultivated. Seed.

- PI 560620 donor id: TU85-033-03-2. origin: Turkey. collected:
  July 22, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-033-03. locality: Tir wheat
  field, stoney volcanic soil. East side of road, 25km N of
  Van, Van Province. latitude: 38 deg. 42 min. N.
  longitude: 43 deg. 20 min. E. elevation: 1720m.
  remarks: Wheat planted in rows, being harvested now.
  Growing with TU85-033-02 and 033-02. Soil pH 7.95. Seed
  red, awned, awns purple. Glumes purple, pubescent.
  Originally collected in same sample as TU85-033-03-1.
  Cultivated. Seed.
- PI 560621 donor id: TU85-036-01-1. origin: Turkey. collected:
  July 23, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-036-01. locality: Tir wheat
  field, tir sown. Clay soil somewhat stoney. Just before
  road forks to Ilikaynak, 10km N of Ercek, Van Province.
  latitude: 38 deg. 43 min. N. longitude: 43 deg. 40 min.
  E. elevation: 1810m. remarks: Growing mixed with
  TU85-036-05 and 036-04 and rye (TU85-036-02 and 036-03).
  Soil pH 8.00. Seed white, awned, awns white. Glumes
  white, pubescent. Originally collected in same sample as
  TU85-036-01-2 -- the two types together comprising about
  5% of field. Cultivated. Seed.
- PI 560622 donor id: TU85-036-01-2. origin: Turkey. collected:
  July 23, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-036-01. locality: Tir wheat
  field, tir sown. Clay soil somewhat stoney. Just before
  road forks to Ilikaynak, 10km N of Ercek, Van Province.
  latitude: 38 deg. 43 min. N. longitude: 43 deg. 40 min.
  E. elevation: 1810m. remarks: Growing mixed with
  TU85-036-05 and 036-04 and rye (TU85-036-02 and 036-03).
  Soil pH 8.00. Seed red, awned, awns white. Glumes white,
  glabrous. Originally collected in same sample as
  TU85-036-01-1 -- the two types together comprising about
  5% of field. Cultivated. Seed.
- DI 560623 donor id: TU85-036-04-1. origin: Turkey. collected:
  July 23, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-036-04. locality: Tir wheat
  field, tir sown. Clay soil somewhat stoney. Just before
  road forks to Ilikaynak, 10km N of Ercek, Van Province.
  latitude: 38 deg. 43 min. N. longitude: 43 deg. 40 min.
  E. elevation: 1810m. remarks: Growing mixed with rye
  (TU85-036-02 and 036-03) and wheat (TU85-036-01 and
  036-05). Soil pH 8.00. Seed white, awned, awns brown.
  Glumes brown, pubescent. Originally collected in same
  sample as TU85-036-04-2 -- the two types together
  comprising about 7% of field. Cultivated. Seed.

- PI 560624 donor id: TU85-036-04-2. origin: Turkey. collected:
  July 23, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-036-04. locality: Tir wheat
  field, tir sown. Clay soil somewhat stoney. Just before
  road forks to Ilikaynak, 10km N of Ercek, Van Province.
  latitude: 38 deg. 43 min. N. longitude: 43 deg. 40 min.
  E. elevation: 1810m. remarks: Growing mixed with rye
  (TU85-036-02 and 036-03) and wheat (TU85-036-01 and
  036-05). Soil pH 8.00. Seed red, awned, awns brown.
  Glumes brown, pubescent. Originally collected in same
  sample as TU85-036-04-1 -- the two types together
  comprising about 7% of field. Cultivated. Seed.
- PI 560625 donor id: TU85-036-05-1. origin: Turkey. collected:
  July 23, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-036-05. locality: Clay soil,
  field of Tir wheat, tir sown, somewhat stoney, 10km N of
  Ercek, just before road forks to Ilikaynak, Van Province.
  latitude: 38 deg. 43 min. N. longitude: 43 deg. 40 min.
  E. elevation: 1810m. remarks: Seed white, awned, awns
  black with white tops. Glumes purple and pubescent.
  Originally collected in same sample as TU-85-036-05-2 -these two types comprising 60% of field. Growing mixed
  with rye (TU85-036-02 & 036-03) and wheat (TU85-036-01 &
  036-04). Soil pH 8.00. Cultivated. Seed.
- PI 560626 donor id: TU85-036-05-2. origin: Turkey. collected:
  July 23, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-036-05. locality: Clay soil,
  field of Tir wheat, tir sown, somewhat stoney, 10km N of
  Ercek, just before road forks to Ilikaynak, Van Province.
  latitude: 38 deg. 43 min. N. longitude: 43 deg. 40 min.
  E. elevation: 1810m. remarks: Seed white, awned, awns
  black with white tops. Glumes purple and pubescent.
  Originally collected in same sample as TU-85-036-05-1 -these two types comprising 60% of field. Growing mixed
  with rye (TU85-036-02 & 036-03) and wheat (TU85-036-01 &
  036-04). Soil pH 8.00. Cultivated. Seed.
- PI 560627 donor id: TU85-038-01. origin: Turkey. collected: July 24, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-038-01. locality: Tir wheat field, rye is a contaminant. Level land, 5km NW of Ercis, than 3.5km N on the road to Kockopru, Van Province. latitude: 39 deg. 05 min. N. longitude: 43 deg. 20 min. E. elevation: 1700m. remarks: Tir wheat. Non-random sample of field. Red spiked plants also occur. Soil pH 7.90. Seed white, awned, awns black and white. Glumes black and white, pubescent. Cultivated. Seed.

- PI 560628 donor id: TU85-044-03. origin: Turkey. collected: July 25, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-044-03. locality: Irrigated wheat field on gentle S slope. On the road to Van, 15km W of Ozalp, Van Province. latitude: 38 deg. 40 min. N. longitude: 43 deg. 53 min. E. elevation: 1920m. remarks: Hand sown field of several types of wheat with some contaminant rye. Spike reddish at maturity. 35% of the field. Soil pH 8.05. Seed white, awnletted, awnlets tan. Glumes tan, pubescent. Sperling Herbarium Voucher no. 6812. Cultivated. Seed.
- PI 560629 donor id: TU85-044-04. origin: Turkey. collected: July 25, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-044-04. locality: Irrigated wheat field on gentle S slope. On the road to Van, 15km W of Ozalp, Van Province. latitude: 38 deg. 40 min. N. longitude: 43 deg. 53 min. E. elevation: 1920m. remarks: Hand sown field of several types of wheat with some contaminant rye. 30% of field. Soil pH 8.05. Seed white, awned, awns black with white tips. Glumes brown, pubescent. Sperling Herbarium Voucher no. 6813. Cultivated. Seed.
- PI 560630 donor id: TU85-044-05-1. origin: Turkey. collected:
  July 25, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-044-05. locality: Irrigated
  wheat field on gentle S slope. On the road to Van, 15km W
  of Ozalp, Van Province. latitude: 38 deg. 40 min. N.
  longitude: 43 deg. 53 min. E. elevation: 1920m.
  remarks: Hand sown field of several types of wheat with
  some contaminant rye. Soil pH 8.05. Seed red, awned, awns
  tan. Glumes tan, non-pubescent. Originally collected in
  same sample as TU85-044-05-2 -- the two types together
  comprising 15% of field. Sperling Herbarium Voucher no.
  6814. Cultivated. Seed.
- PI 560631 donor id: TU85-044-05-2. origin: Turkey. collected:
  July 25, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-044-05. locality: Irrigated
  wheat field on gentle S slope. On the road to Van, 15km W
  of Ozalp, Van Province. latitude: 38 deg. 40 min. N.
  longitude: 43 deg. 53 min. E. elevation: 1920m.
  remarks: Hand-sown field of several types of wheat with
  some contaminant rye. Soil pH 8.05. Seed white, awned,
  awns tan. Glumes tan, non-pubescent. Originally collected
  in same sample as TU85-044-05-1 -- the two types together
  comprising 15% of field. Sperling Herbarium Voucher no.
  6814. Cultivated. Seed.

- PI 560632 donor id: TU85-045-01-1. origin: Turkey. collected:
  July 27, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-045-01. locality: Irrigated,
  cultivated wheat field on gentle N slope. South side of
  Esendere River, 1 km W of Esendere, Hakkari Province.
  latitude: 37 deg. 43 min. N. longitude: 44 deg. 36 min.
  E. elevation: 1700m. remarks: Harvested in July. Soil
  pH 8.10. Seed red, awned, awns white. Glumes white,
  non-pubescent. Beaks moderately long, sharp. Originally
  collected in same sample as TU85-045-01-2. Cultivated.
  Seed.
- PI 560633 donor id: TU85-045-01-2. origin: Turkey. collected:
  July 27, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-045-01. locality: Irrigated wheat field on gentle S slope. South side of Esendere River, 1 km W of Esendere, Hakkari Province. latitude:
  37 deg. 43 min. N. longitude: 44 deg. 36 min. E.
  elevation: 1700m. remarks: Harvested in July. Soil pH
  8.10. Seed red, awned, awns white. Glumes white, non-pubescent. Beaks sharp, but not pointed. Originally collected in same sample as TU85-045-01-1. Cultivated. Seed.
- PI 560634 donor id: TU85-045-02. origin: Turkey. collected: July 27, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-045-02. locality: Irrigated, cultivated wheat field on gentle S slope. South side of Esendere River, 1 km W of Esendere, Hakkari Province. latitude: 37 deg. 43 min. N. longitude: 44 deg. 36 min. E. elevation: 1700m. remarks: Harvested in July. Soil pH 8.10. Seed red, awned, awns brown. Glumes brown, non-pubescent. Cultivated. Seed.
- PI 560635

  donor id: TU85-048-01. origin: Turkey. collected: July 28, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-048-01. locality: Cultivated wheat field, W side of road, 4km S of Hakkari-Van Province boundary. On the road Hakkari-Van, Hakkari Province. latitude: 37 deg. 44 min. N. longitude: 44 deg. 05 min. E. elevation: 1820m. remarks: Awnless, pubescent spike. Field irrigated once. A few individual plants of other vars mixed in field. Soil ph 7.95. Cultivated. Seed.

- PI 560636 donor id: TU85-048-02. origin: Turkey. collected: July 28, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-048-02. locality: Cultivated wheat field, W side of road, 4km S of Hakkari-Van province boundary on the road Hakkari-Van. Hakkari Province. latitude: 37 deg. 44 min. N. longitude: 44 deg. 05 min. E. elevation: 1750m. remarks: Irrigated field. Growing mixed with TU85-048-03, 048-04, 048-05, and 048-06. Comprises 90% of field. Soil ph 7.80. Seed red, awned, awns brown. Glumes brown, non-pubescent. Spike short and moderately compact. Cultivated. Seed.
- DI 560637 donor id: TU85-048-03-1. origin: Turkey. collected:
  July 28, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-048-03. locality: Cultivated wheat field, W side of road, 4km S of Hakkari-Van Province boundary. On the road Hakkari-Van, Hakkari Province. latitude: 37 deg. 44 min. N. longitude: 44 deg. 05 min. E. elevation: 1750m. remarks: Several vars. mixed in field (2 bags collected) Soil pH 7.80. Seed red, awned, awns white. Glumes white, non-pubescent. Growing mixed with TU85-048-02, 048-04 and 048-05. Originally collected in same sample as TU85-048-03-2 -- the two types together comprising 5% of field. Cultivated. Seed.
- DI 560638 donor id: TU85-048-03-2. origin: Turkey. collected:
  July 28, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-048-03. locality: Cultivated wheat field, W side of road, 4km S of Hakkari-Van
  Province boundary. On the road Hakkari-Van, Hakkari
  Province. latitude: 37 deg. 44 min. N. longitude: 44
  deg. 05 min. E. elevation: 1750m. remarks: Several
  vars. mixed in field (2 bags collected). Soil pH 7.80.
  Seed white, awned, awns white. Glumes white,
  non-pubescent. Growing mixed with TU85-048-02, 048-04 and
  048-05. Originally collected in same sample as
  TU85-048-03-1 -- the two types comprising 5% of field.
  Cultivated. Seed.
- DI 560639 donor id: TU85-048-04-1. origin: Turkey. collected:
  July 28, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-048-04. locality: Cultivated wheat field, W side of road, 4km S of Hakkari-Van
  Province boundary. On the road Hakkari-Van, Hakkari
  Province. latitude: 37 deg. 44 min. N. longitude: 44
  deg. 05 min. E. elevation: 1750m. remarks: Several vars. mixed in field. Soil pH 7.80. Seed red, awned, awns brown. Glumes brown, glabrous. Spike slender. Growing mixed with TU85-048-02, 048-03 and 048-05. Originally collected in same sample as TU85-048-04-2 -- the two types comprising 2% of field. Cultivated. Seed.

- PI 560640 donor id: TU85-048-04-2. origin: Turkey. collected:
  July 28, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-048-04. locality: Cultivated wheat field, W side of road, 4km S of Hakkari- Van Province boundary. On road Hakkari-Van, Hakkari Province. latitude: 37 deg. 44 min. N. longitude: 44 deg. 05 min. E. elevation: 1750m. remarks: Several vars. mixed in field. Soil pH 7.80. Seed white, awned, awns brown. Glumes brown, glabrous. Spike slender. Growing mixed with TU85-048-02, 048-03 and 048-05. Originally collected in same sample as TU85-048-04-1 -- the two types comprising 2% of field. Cultivated. Seed.
- PI 560641 donor id: TU85-048-05. origin: Turkey. collected: July 28, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-048-05. locality: Cultivated wheat field, W side of road, 4km S of Hakkari-Van Province boundary. On the road Hakkari-Van, Hakkari Province. latitude: 37 deg. 44 min. N. longitude: 44 deg. 05 min. E. elevation: 1750m. remarks: 2% of field. Several vars. mixed in field. Growing mixed with TU85-048-02, 048-03 and 048-04. Soil pH 7.80. Seed white, awnletted, awnlets tan. Glumes tan, pubescent. Spike slender. Cultivated. Seed.
- PI 560642 donor id: TU85-049-01. origin: Turkey. collected: July 29, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-049-01. locality: Level land near Lake Van, soil not stoney (E side of road), 8.5km S of Van on road to Tatvan, Van Province. latitude: 38 deg. 27 min. N. longitude: 43 deg. 20 min. E. elevation: 1640m. remarks: Harvested in July. 85% of field. Growing mixed with TU85-049-02. Soil pH 8.15. Seed white, awned, awns brown. Glumes brown, non-pubescent. Cultivated. Seed.
- PI 560643 donor id: TU85-049-02-1. origin: Turkey. collected:
  July 29, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-049-02. locality: Level land
  near Lake Van, soil not stoney (E side of road), 8.5km S
  of Van on road to Tatvan, Van Province. latitude: 38
  deg. 27 min. N. longitude: 43 deg. 20 min. E.
  elevation: 1640m. remarks: Harvested in July. Growing
  mixed with TU85-049-01. Soil pH 8.15. Seed red, awned,
  awns white. Glumes white, non-pubescent. Originally
  collected in same sample with TU85-049-02-2 -- the two
  types together comprising 10% of field. Cultivated.
  Seed.

- PI 560644 donor id: TU85-049-02-2. origin: Turkey. collected:
  July 29, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-049-02. locality: Level land
  near Lake Van, soil not stoney (E side of road), 8.5km S
  of van on road to Tatvan, Van Province. latitude: 38
  deg. 27 min. N. longitude: 43 deg. 20 min. E.
  elevation: 1640m. remarks: Harvested in July. Growing
  mixed with TU85-049-01. Soil pH 8.15. Seed white.
  Originally collected in same sample as TU85-049-02-1 -the two types together comprising 10% of field.
  Cultivated. Seed.
- PI 560645

  donor id: TU85-050-01. origin: Turkey. collected: July 30, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-050-01. locality: Cultivated field on level soil near Lake Van. Not irrigated. On road to Van, 3km E of Gevas, Van Province. latitude: 38 deg. 18 min. N. longitude: 43 deg. 08 min. E. elevation: 1650m. remarks: Sown in October, harvested in July. Said to be from Mexico. and grown here for about 15 years. 95% of field. Growing mixed with TU85-050-02 and 050-03. Soil pH 7.85. Seed white, awned, awns brown. Glumes brown, non-pubescent. Cultivated. Seed.
- PI 560646 donor id: TU85-050-02. origin: Turkey. local name:
  Kerik. collected: July 30, 1985. collector: C.R.
  Sperling, D. Eser, H.H. Gecit. collector id:
  TU85-050-02. locality: Cultivated field on level soil
  near Lake Van. Not irrigated. On road to Van, 3km E of
  Gevas, Van Province. latitude: 38 deg. 18 min. N.
  longitude: 43 deg. 08 min. E. elevation: 1650m.
  remarks: Sown in October, harvested in July. Said to be
  grown in this area for 100 years, reported to be local
  variety. 3 % of field. Growing mixed with TU85-050-01 and
  050-03. Seed white, awnletted, awnlets brown. Glumes
  brown, pubescent. Soil pH 7.85. Cultivated. Seed.
- DI 560647 donor id: TU85-050-03-1. origin: Turkey. collected:
  July 30, 1985. collector: C.R. Sperling, D. Eser, H.H.

  Gecit. collector id: TU85-050-03. locality: Cultivated field on level soil near Lake Van. Not irrigated. On road to Van, 3km E of Gevas, Van Province. latitude: 38 deg.

  18 min. N. longitude: 43 deg. 08 min. E. elevation:
  1650m. remarks: Sown in October, harvested in July. Most likely the same as 050-01. Growing mixed with TU85-050-01 and 050-02. Soil pH 7.85. Seed red, awned, awns white.
  Glumes white, non-pubescent. Originally collected in same sample as TU85-050-03-2 -- the two types together comprising about 1% of field. Cultivated. Seed.

- PI 560648 donor id: TU85-050-03-2. origin: Turkey. collected:
  July 30, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-050-03. locality: Cultivated
  field on level soil near Lake Van. Not irrigated. On road
  to Van, 3km E of Gevas, Van Province. latitude: 38 deg.
  18 min. N. longitude: 43 deg. 08 min. E. elevation:
  1650m. remarks: Sown in October, harvested in July. Most
  likely the same as 050-01. Growing mixed with TU85-050-01
  and 050-02. Soil pH 7.85. Seed white, awned, awns white.
  Glumes white, non-pubescent. Originally collected in same
  sample as TU85-050-03-1 -- the two types together
  comprising about 1% of field. Cultivated. Seed.
- PI 560649 donor id: TU85-051-01-1. origin: Turkey. collected:
  July 30, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-051-01. locality: Cultivated field on slight E slope, stoney soil. On the road to Tatvan from Van, 9km W of Van-Bitlis Province boundary, Bitlis Province. latitude: 38 deg. 23 min. N.
  longitude: 42 deg. 43 min. E. elevation: 1860m.
  remarks: Sown in October, harvested in July. Reported to be improved variety received from government. Growing mixed with TU85-051-02 and rye (051-03 and 051-04). Rye is contaminant in wheat field. Soil pH 7.60. Seed red, awned, awns brown. Glumes brown, non-pubescent.
  Originally collected in same sample as TU85-051-01-2 -- the two types together comprising about 70% of field. Cultivated. Seed.
- donor id: TU85-051-01-2. origin: Turkey. collected: PI 560650 July 30, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-051-01. locality: Cultivated field on slight E slope, stoney soil. On road to Tatvan from Van, 9km W of Van-Bitlis Province boundary, Bitlis Province. latitude: 38 deg. 23 min. N. longitude: deg. 43 min. E. elevation: 1860m. remarks: Sown in October, harvested in July. Reported to be improved variety received from government. Growing mixed with TU85-051-02 and rye (051-03 and 051-04). Rye is contaminant in wheat field. Soil pH 7.60. Seed white, awned, awns brown. Glumes brown, non-pubescent. Originally collected in same sample as TU85-051-01-1 -the two types together comprising about 70% of field. Cultivated. Seed.

- PI 560651 donor id: TU85-051-02. origin: Turkey. collected: July 30, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-051-02. locality: Cultivated field on slight E slope, stoney soil. On the road to Tatvan from Van, 9km W of Van-Bitlis Province boundary, Bitlis Province. latitude: 38 deg. 23 min. N. longitude: 42 deg. 43 min. E. elevation: 1860m. remarks: Hand sown in October, harvested in July. 7% of field. Growing mixed with TU85-051-01 and rye (051-03 and 051-04). Rye is contaminant in wheat field. Soil pH 7.60. Seed red, awned, awns white. Glumes white, non-pubescent. Cultivated. Seed.
- PI 560652 donor id: TU85-053-01. origin: Turkey. collected: July 31, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-053-01. locality: Cultivated wheat field, very fine soil (volcanic?), rolling land, 1.5km E of Yenikopru, Bitlis Province. latitude: 38 deg. 44 min. N. longitude: 42 deg. 26 min. E. elevation: 1690m. remarks: Sown with Tir planter, several types mixed. Tir wheat. Random sample for type. 70% of field. Growing mixed with TU85-053-02 and 053-03. Soil pH 7.85. Seed red, awns white. Glumes white, glabrous. Cultivated. Seed.
- DI 560653 donor id: TU85-053-02-2. origin: Turkey. collected:
  July 31, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-053-02. locality: Cultivated wheat field, very fine soil (volcanic?), rolling land,
  1.5km E of Yenikopru, Bitlis Province. latitude: 38 deg.
  44 min. N. longitude: 42 deg. 26 min. E. elevation:
  1690m. remarks: Tir wheat. Growing mixed with
  TU85-053-01 and 053-03. Seed red, awned, awns brown.
  Glumes brown. Originally collected as a random sample for type in the same sample as TU85-053-02-1 -- the two types together comprising 15% of [G. Cultivated. Seed.
- PI 560654 donor id: TU85-053-03. origin: Turkey. collected: July 31, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-053-03. locality: Cultivated wheat field, very fine soil (volcanic?), rolling land, 1.5km E of Yenikopru, Bitlis Province. latitude: 38 deg. 44 min. N. longitude: 42 deg. 26 min. E. elevation: 1690m. remarks: Tir wheat. Random sample for type. 15% of field. Growing mixed with TU85-053-01 and 053-02. Soil pH 7.85. Seed white, awns and glumes a mixture of black and white. Glumes non-pubescent. Cultivated. Seed.

- PI 560655 donor id: TU85-054-03. origin: Turkey. collected: July 31, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-054-03. locality: Cultivated field of T. durum, fine grained soil, rolling land, 7km SE of Ovkakisla, Bitlis Province. latitude: 38 deg. 46 min. N. longitude: 42 deg. 22 min. E. elevation: 1770m. remarks: Tir wheat. 1% of field. Grown with TU85-054-06, T. durum (054-01 and 054-02) and rye (054-04 and 054-05). Only field of T. durum seen here. May have been fertilized. Some slender red Tir here also. T. aestivum and rye are contaminants in field. Soil pH 7.60. Seed white, awns and glumes a mixture of black and white. Glumes pubescent. Cultivated. Seed.
- PI 560656 donor id: TU85-054-06. origin: Turkey. collected: July 31, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-054-06. locality: Cultivated field of T. durum, fine grained soil, rolling land, 7km SE of Ovkakisla, Bitlis Province. latitude: 38 deg. 46 min. N. longitude: 42 deg. 22 min. E. elevation: 1770m. remarks: Planted with Tir planter. Only field of T. durum seen here, may have been fertilized. Less than 1% of field. Growing mixed with TU85-054-03, T. durum (054-01 and 054-02) and rye (054-04 and 054-05). T. aestivum and rye are contaminants. Seed white, awnletted, awnlets brown. Glumes brown, pubescent. Cultivated. Seed.
- PI 560657 donor id: TU85-056-05-1. origin: Turkey. collected:
  August 01, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-056-05. locality: Cultivated
  tir wheat field along lake, 15km W of Adilcevaz, Mus
  Province. latitude: 38 deg. 46 min. N. longitude: 42
  deg. 36 min. E. elevation: 1620m. remarks: Tir wheat.
  Fine soil, not rocky. Harvesting now. Sown September.
  Fertilizer used. Soil pH 7.95. Seed white, large, awned,
  awns brown. Glumes brown, non-pubescent. Originally
  collected in a random sample also including TU85-056-05-2
  and TU85-056-05-3. Cultivated. Seed.
- PI 560658

  donor id: TU85-056-05-2. origin: Turkey. collected:
  August 01, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-056-05. locality: Cultivated
  tir wheat field along lake, 15km W of Adilcevaz, Mus
  Province. latitude: 38 deg. 46 min. N. longitude: 42
  deg. 36 min. E. elevation: 1620m. remarks: Tir wheat.
  Fine soil, not rocky. Harvesting now. Sown September.
  Fertilizer used. Soil pH 7.95. Seed white, large, awned,
  awns brown. Glumes brown, pubescent. Originally collected
  in a random sample also including TU85-056-05-1 and
  TU85-056-05-3. Cultivated. Seed.

- PI 560659 donor id: TU85-056-05-3. origin: Turkey. collected:
  August 01, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-056-05. locality: Cultivated tir wheat field along lake, 15km W of Adilcevaz, Mus Province. latitude: 38 deg. 46 min. N. longitude: 42 deg. 36 min. E. elevation: 1620m. remarks: Tir wheat. Fine soil, not rocky. Harvesting now. Sown September. Fertilizer used. Soil pH 7.95. Seed white, short and plump, awned, awns and glumes black and white. Originally collected in a random sample also including TU85-056-05-1 and TU85-056-05-2. Cultivated. Seed.
- PI 560660 donor id: TU85-058-01. origin: Turkey. collected:
  August 01, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-058-01. locality: Tir wheat
  field, fertilized. North sloping field, 5km E of Gencali,
  Agri Province. latitude: 39 deg. 04 min. N. longitude:
  42 deg. 55 min. E. elevation: 1780m. remarks: Random
  sample of several color morphs. Tir wheat. Soil ph 7.27.
  Seed amber, awned, awns and glumes brown and black.
  Glumes pubescent. Cultivated. Seed.
- PI 560661 donor id: TU85-060-01-1. origin: Turkey. collected:
  August 02, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-060-01. locality: Tir wheat
  field, stoney soil, 3.6km SE of Agri-Van Province border,
  then 1 km N of hwy on road Patnos-Ercis, Van Province.
  latitude: 39 deg. 09 min. N. longitude: 43 deg. 08 min.
  E. elevation: 1900m. remarks: Cultivated Tir-sown
  August, harvested August. Tir wheat. Soil pH 7.30. Seed
  white, awned, awns brown. Glumes brown, pubescent, very
  sharp beaks. Originally collected in one random sample of
  all color morphs which also included TU85-060-01-2,
  TU85-060-01-3, TU85-060-01-4 and TU85-060-01-5.
  Cultivated. Seed.
- PI 560662 donor id: TU85-060-01-2. origin: Turkey. collected:
  August 02, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-060-01. locality: Tir wheat
  field, stoney soil, 3.6km SE of Agri-Van Province border,
  then 1 km N of hwy on road Patnos-Ercis, Van Province.
  latitude: 39 deg. 09 min. N. longitude: 43 deg. 08 min.
  E. elevation: 1900m. remarks: Cultivated Tir-sown
  August, harvested August. Tir wheat. Soil pH 7.30. Seed
  large, white, awned, awns white. Glumes white, pubescent.
  Originally collected in one random sample of all color
  morphs which also included TU85-060-01-1, TU85-060-01-3,
  TU85-060-01-4, TU85-060-01-5. Cultivated. Seed.

- PI 560663 donor id: TU85-060-01-3. origin: Turkey. collected:
  August 02, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-060-01. locality: Tir wheat
  field, stoney soil, 3.6km SE of Agri-Van Province border,
  then 1 km N of hwy on road Patnos-Ercis, Van Province.
  latitude: 39 deg. 09 min. N. longitude: 43 deg. 08 min.
  E. elevation: 1900m. remarks: Cultivated Tir-sown
  August, harvested August. Tir wheat. Soil pH 7.30. Seed
  red, awned, awns brown. Glumes brown, pubescent.
  Originally collected in one random sample of all color
  morphs which also included TU85-060-01-1, TU85-060-01-2,
  TU85-060-01-4, and TU85-060-01-5. Cultivated. Seed.
- PI 560664 donor id: TU85-060-01-4. origin: Turkey. collected:
  August 02, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-060-01. locality: Tir wheat
  field, stoney soil, 3.6km SE of Agri-Van Province border,
  then 1 km N of hwy on road Patnos-Ercis, Van Province.
  latitude: 39 deg. 09 min. N. longitude: 43 deg. 08 min.
  E. elevation: 1900m. remarks: Cultivated Tir-sown
  August, harvested August. Tir wheat. Soil pH 7.30. Seed
  amber, awned, awns and glumes black and white. Glumes
  pubescent. Originally collected in one random sample of
  all color morphs which also included TU85-060-01-1,
  TU85-060-01-2, TU85-0060-01-3, and TU85-060-01-5.
  Cultivated. Seed.
- PI 560665 donor id: TU85-060-01-5. origin: Turkey. collected:
  August 02, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-060-01. locality: Tir wheat
  field, stoney soil, 3.6km SE of Agri-Van Province border,
  then 1 km N of hwy on road Patnos-Ercis, Van Province.
  latitude: 39 deg. 09 min. N. longitude: 43 deg. 08 min.
  E. elevation: 1900m. remarks: Cultivated Tir-sown
  August, harvested August. Tir wheat. Soil pH 7.30. Seed
  white, awned, awns brown. Glumes brown, pubescent.
  Originally collected in one random sample of all color
  morphs which also included TU85-060-01-1, TU85-060-01-2,
  TU85-060-01-3, and TU85-060-01-4. Cultivated. Seed.
- PI 560666 donor id: TU85-062-01. origin: Turkey. collected:
  August 03, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-062-01. locality: Cultivated wheat field in level terrain, 2km N of Oglalsuyu, Agri Province. latitude: 39 deg. 28 min. N. longitude: 42 deg. 46 min. E. elevation: 1650m. remarks: Most wheat fields in area now harvested. This field apparently hand sown (Kerick type). 50% of field. Growing mixed with TU85-062-02. Soil pH 7.22. Seed white, awnletted, awnlets white. Glumes white, pubescent. Cultivated. Seed.

- PI 560667 donor id: TU85-062-02. origin: Turkey. collected:
  August 03, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-062-02. locality: Cultivated wheat field in level terrain, 2km N of Oglalsuyu, Agri Province. latitude: 39 deg. 28 min. N. longitude: 42 deg. 46 min. E. elevation: 1650m. remarks: Most wheat fields in area now harvested. This field apparently hand sown (Kerick type). 50% of field. Growing mixed with TU85-062-01. Soil pH 7.22. Seed white, awned, awns white. Glumes tan, glabrous. Cultivated. Seed.
- PI 560668 donor id: TU85-066-01. origin: Turkey. local name:
  Bahare. collected: August 03, 1985. collector: C.R.
  Sperling, D. Eser, H.H. Gecit. collector id:
  TU85-066-01. locality: Region of scattered coppiced oak scrub on hillside. Cultivated wheat field, 1 km N of village of Kazan, or 6.5km N of Karakale, Mus Province.
  latitude: 38 deg. 53 min. N. longitude: 41 deg. 58 min.
  E. elevation: 1670m. remarks: Sown in April, harvested now. Vicia and Cephalaria syriaca are occasional weeds in field. Soil pH 7.30. Seed red, awned, awns white. Glumes white, non-pubescent. Sperling Herbarium Voucher no. 6823. Cultivated. Seed.
- PI 560669 donor id: TU85-067-01. origin: Turkey. local name:
  Toptopik. collected: August 04, 1985. collector: C.R.
  Sperling, D. Eser, H.H. Gecit. collector id:
  TU85-067-01. locality: Cultivated wheat field, 1.8km N
  of jct to Mus on Bitlis-Tatvan hwy, 10km from Tatvan,
  Bitlis Province. latitude: 38 deg. 30 min. N.
  longitude: 42 deg. 12 min. E. elevation: 1770m.
  remarks: 90% of field. Growing mixed with TU85-067-02.
  Soil pH 6.80. Hand-sown in November, harvested in August.
  Field planted to wheat every year. Seed short, white,
  awnletted, awnlets white. Glumes white, non-pubescent.
  Spike short. Cultivated. Seed.
- PI 560670 donor id: TU85-067-02. origin: Turkey. collected:
  August 04, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-067-02. locality: Cultivated wheat field, 1.8km N of jct to Mus on Bitlis-Tatvan hwy, 10km from Tatvan, Bitlis Province. latitude: 38 deg. 30 min. N. longitude: 42 deg. 12 min. E. elevation:
  1770m. remarks: Kerick type. 10% of field. Growing mixed with TU85-067-01. Soil pH 6.80. Hand-sown in November, harvested in August. Field planted to wheat every year. Seed white, awnletted, awnlets tan. Glumes brown, pubescent. Cultivated. Seed.

- PI 560671 donor id: TU85-068-01-1. origin: Turkey. collected:
  August 04, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-068-01. locality: Cultivated wheat field, 2.2km W of Mus road jct with Bitlis-Tatvan road, than 0.75km N along N side of railroad tracks,
  Bitlis Province. latitude: 38 deg. 31 min. N.
  longitude: 42 deg. 11 min. E. elevation: 1760m.
  remarks: Tir wheat, spikes mostly black, some red, few white. Tir sown in mid August, being harvested now. Soil pH 6.85. Seed white, awned, awns white. Glumes white, pubescent. Originally collected in a random sample of all types including TU85-068-01-2 and TU85-068-01-3.
  Cultivated. Seed.
- PI 560672 donor id: TU85-068-01-2. origin: Turkey. collected:
  August 04, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-068-01. locality: Cultivated wheat field, 2.2km W of Mus road jct with Bitylis-Tatvan road, then 0.75km N along N side of railroad tracks, Bitlis Province. latitude: 38 deg. 31 min. N.
  longitude: 42 deg. 11 min. E. elevation: 1760m.
  remarks: Tir-wheat, spikes mostly black, some red, few white. Tir sown in mid August, being harvested now. Soil pH 6.85. Seed white, awned, awns brown. Glumes brown, pubescent. Originally collected in a random sample of all types including TU85-068-01-1 and TU85-068-01-3. Cultivated. Seed.
- PI 560673 donor id: TU85-068-01-3. origin: Turkey. collected:
  August 04, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-068-01. locality: Cultivated wheat field, 2.2km W of Mus road jct with Bitylis-Tatvan road, then 0.75km N along N side of railroad tracks,
  Bitlis Province. latitude: 38 deg. 31 min. N.
  longitude: 42 deg. 11 min. E. elevation: 1760m.
  remarks: Tir-wheat, spikes mostly black, some red, few white. Tir sown in mid August, being harvested now. Soil pH 6.85. Seed white, awned, awns and glumes black and white. Glumes pubescent. Originally collected in a random sample of all types including TU85-068-01-1 and TU85-068-01-2. Cultivated. Seed.

- PI 560674 donor id: TU85-071-02. origin: Turkey. local name:
  Bahara. collected: August 09, 1985. collector: C.R.
  Sperling, D. Eser, H.H. Gecit. collector id:
  TU85-071-02. locality: Level area between two small streams, oak scrub on surrounding slopes, 4.0km S of Bitlis, then 5.5km E, just to right on fork in road, Bitlis Province. latitude: 38 deg. 19 min. N.
  longitude: 42 deg. 07 min. E. elevation: 1500m.
  remarks: Seed red, awned, awns white. Glumes white, glabrous. Sown in April-May, harvested now. Cultivated. Seed.
- PI 560675 donor id: TU85-072-01. origin: Turkey. collected:
  August 09, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-072-01. locality: Cultivated field of several wheat varieties. Oak scrub on surrounding slopes. Level area between two small streams, 4.0km S of Bitlis, then 5.5km E just to left on fork in road, Bitlis Province. latitude: 38 deg. 19 min. N. longitude: 42 deg. 07 min. E. elevation: 1520m. remarks: Cultivated field of several wheat varieties. Tir sown in rows. 25% of field. Soil pH 6.57. Growing mixed with T. aestivum (TU85-072-02 and 072-03). Seed white, awned, awns black with white tip. Glumes brown, pubescent. Cultivated. Seed.
- PI 560676 donor id: TU85-072-02. origin: Turkey. collected:
  August 09, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-072-02. locality: Cultivated wheat field, oak scrub on surrounding slopes. Level area between two small streams, 4.0km S of Bitlis, then 5.5km E just to left on fork in road, Bitlis Province.
  latitude: 38 deg. 19 min. N. longitude: 42 deg. 07 min.
  E. elevation: 1520m. remarks: Several wheat varieties.
  Tir wheat sown in rows. 70% of field, Kerick type.
  Growing mixed with TU85-072-01 and TU85-072-03. Soil pH 6.57. Seed white, awned, awns tan. Glumes brown, pubescent. Cultivated. Seed.
- PI 560677 donor id: TU85-072-03. origin: Turkey. collected:
  August 09, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-072-03. locality: Cultivated wheat field, oak scrub on surrounding slopes. Level area between two small streams, 4.0km S of Bitlis, then 5.5km E just to left on fork in road, Bitlis Province.
  latitude: 38 deg. 19 min. N. longitude: 42 deg. 07 min.
  E. elevation: 1520m. remarks: Cultivated field of several wheat varieties. Tir sown in rows, 5% of field.
  Growing mixed with TU85-072-02 and TU85-072-01. Soil pH 6.57. Seed white, awned, awns brown. Glumes brown, non-pubescent. Cultivated. Seed.

- PI 560678 donor id: TU85-072-04-1. origin: Turkey. collected:
  August 09, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-072-04. locality: Cultivated wheat field, level area between two small streams, oak scrub on surround slopes, 4.0km S of Bitlis, then 5.5km E just to left on fork in road, Bitlis Province. latitude: 38 deg. 19 min. N. longitude: 42 deg. 07 min. E. elevation: 1520m. remarks: Tir wheat. Soil pH 6.49. Seed white, awned, awns white. Glumes white, non-pubescent. Originally collected in a random sample of mixed color morphs including TU85-072-04-2, TU85-072-04-3, and TU85-072-04-4. Cultivated. Seed.
- PI 560679 donor id: TU85-072-04-2. origin: Turkey. collected:
  August 09, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-072-04. locality: Cultivated wheat field, level area between two small streams, oak scrub on surrounding slopes, 4.0km S of Bitlis, then 5.5km E just to left on fork of road, Bitlis Province. latitude: 38 deg. 19 min. N. longitude: 42 deg. 07 min. E. elevation: 1520m. remarks: Tir wheat. Soil pH 6.49. Seed large, white, awnletted, awns and glumes brown and black. Glumes pubescent. Originally collected in a random sample of mixed color morphs including TU85-072-04-01, TU85-072-04-03, and TU85-072-04-4. Cultivated. Seed.
- PI 560680 donor id: TU85-072-04-3. origin: Turkey. collected:
  August 09, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-072-04. locality: Cultivated wheat field, level area between two small streams, oak scrub on surrounding slopes, 4.0km S of Bitlis, then 5.5km E just to left on fork of road, Bitlis Province. latitude: 38 deg. 19 min. N. longitude: 42 deg. 07 min. E. elevation: 1520m. remarks: Tir wheat. Soil pH 6.49. Seed white, awned, awns brown. Glumes brown, non-pubescent. Originally collected in a random sample of mixed color morphs including TU85-072-04-1, TU85-072-04-2, and TU85-072-04-4. Cultivated. Seed.
- PI 560681 donor id: TU85-072-04-4. origin: Turkey. collected:
  August 09, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-072-04. locality: Cultivated wheat field, level area between two small streams, oak scrub on surrounding slopes, 4.0km S of Bitlis, then 5.5km E just to left on fork of road, Bitlis Province. latitude: 38 deg. 19 min. N. longitude: 42 deg. 07 min. E. elevation: 1520m. remarks: Tir wheat. Soil pH 6.49. Seed red, awned, awns black. Glumes black, pubescent. Originally collected in a random sample of mixed color morphs including TU85-072-04-1, TU85-072-04-2, and TU85-072-04-3. Cultivated. Seed.

- PI 560682 donor id: TU85-076-01. origin: Turkey. collected:
  August 10, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-076-01. locality: Open area
  near crest of hills, 3-4 fields of irrigated wheat in
  slight valley. 6.5km from Kavak on road from Mutki,
  Bitlis Province. latitude: 38 deg. 27 min. N.
  longitude: 41 deg. 51 min. E. elevation: 1570m.
  remarks: Just maturing. Random sample. Soil pH 6.95. Seed
  red, awns white. Glumes white, non-pubescent. Sperling
  Herbarium Voucher no. 6845. Cultivated. Seed.
- PI 560683 donor id: TU85-078-01. origin: Turkey. collected:
  August 10, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-078-01. locality: Large
  threshing pile in village from one field, Kavak village,
  Bitlis Province. latitude: 38 deg. 29 min. N.
  longitude: 41 deg. 49 min. E. elevation: 1330m.
  remarks: Planted October, irrigated field. Growing mixed
  with TU85-078-02, 078-03 and rye (078-04). Seed red,
  awned, awns white. Glumes white, non-pubescent.
  Cultivated. Seed.
- PI 560684 donor id: TU85-078-02-1. origin: Turkey. collected:
  August 10, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-078-02. locality: Large
  threshing pile in village from one field, Kavak village,
  Bitlis Province. latitude: 38 deg. 29 min. N.
  longitude: 41 deg. 49 min. E. elevation: 1330m.
  remarks: Planted October, irrigated field. Growing mixed
  with TU85-078-01, 078-03, and rye (078-04). Seed red,
  awned, awns brown. Glumes brown, non-pubescent. Spike
  short, moderately dense. Originally collected in same
  sample as TU85-078-02-2. Cultivated. Seed.
- PI 560685

  donor id: TU85-078-02-2. origin: Turkey. collected:
  August 10, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-078-02. locality: Large
  threshing pile in village from one field, Kavak village,
  Bitlis Province. latitude: 38 deg. 29 min. N.
  longitude: 41 deg. 49 min. E. elevation: 1330m.
  remarks: Planted October, irrigated field. Growing mixed
  with TU85-078-01, 078-03, and rye (078-04). Seed white,
  awned, awns brown. Glumes brown, non-pubescent. Spike
  short, moderately dense. Originally collected in same
  sample as TU85-078-02-1. Cultivated. Seed.

- PI 560686 donor id: TU85-078-03-1. origin: Turkey. collected:
  August 10, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-078-03. locality: Large
  threshing pile in village from one field, Kavak village,
  Bitlis Province. latitude: 38 deg. 29 min. N.
  longitude: 41 deg. 49 min. E. elevation: 1330m.
  remarks: Red spikes, awned. Planted October, irrigated
  field. Growing mixed with TU85-078-01, 078-02, and rye
  (078-04). Seed white and red, awned, awns tan. Glumes
  brown, glabrous. Originally collected in same sample as
  TU85-078-03-2. Cultivated. Seed.
- PI 560687 donor id: TU85-082-01. origin: Turkey. collected:
  August 12, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-082-01. locality: Hard-sown
  cult. field, E slope overlooking river valley, soil
  somewhat stoney, 8.6km S of Hasanovasuyu river crossing
  (Abdurahmanpasa) on road from Varto to Mus. Or 5.8km S of
  Tepekoy village on road from Varto to Mus, Mus Province.
  latitude: 39 deg. 03 min. N. longitude: 41 deg. 31 min.
  E. elevation: 1250m. remarks: Soil pH 7.80. Scattered
  wild Pyrus and Crataegus. Random sample. Seed red awned,
  awns white. Glumes white, non-pubescent. Cultivated.
  Seed.
- PI 560688 donor id: TU85-084-01. origin: Turkey. collected:
  August 12, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-084-01. locality: Small basin in area covered by lava flow. Soil developed here, but mostly rock elsewhere. On road from Varto to Yoncali, 19km E of Sanlica, Mus Province. latitude: 39 deg. 04 min. N. longitude: 41 deg. 47 min. E. elevation: 1440m. remarks: Cultivated wheat field. Little farming except around basin. Planted April, harvested August. Soil pH 7.75. Seed red, awned, awns white. Glumes white, non-pubescent. Cultivated. Seed.
- PI 560689 donor id: TU85-086-01. origin: Turkey. collected:
  August 13, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-086-01. locality: Irrigated wheat field, 8.4km E of Kucuksu on road from Tatvan to Van, Bitlis Province. latitude: 38 deg. 27 min. N.
  longitude: 42 deg. 24 min. E. elevation: 1750m.
  remarks: Planted April, harvested August. Setaria sp.,
  Cirsium, Convolvulus are weeds in field. No Aegilops.
  Soil pH 7.24. Seed red, awned, awns white. Glumes white, non-pubescent. Sperling Herbarium Voucher no. 6857.
  Cultivated. Seed.

- PI 560690 donor id: TU85-088-01-1. origin: Turkey. collected: August 16, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-088-01. locality: Non-irrigated wheat field at edge of lava flow. Transition area from metamorphic rock outcrops to exposed lava flow. Level ground. On road to Agri, 25km W of Doqubayazit. At Seshat roadside restaurant, Agri Province. latitude: 39 deg. 35 min. N. longitude: deq. 48 min. E. elevation: 1710m. remarks: Tir wheat sown with Tir sowing machine. Soil pH 7.60. Awned, awns and glumes black and white. Glumes pubescent, sharp beaks. Originally collected in random sample of color morphs including TU85-088-01-2, TU85-088-01-3, TU85-088-01-4, TU85-088-01-5, TU85-088-01-6, and TU85-088-01-7. Cultivated. Seed.
- donor id: TU85-088-01-2. origin: Turkey. collected: PI 560691 August 16, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-088-01. locality: Non-irrigated wheat field at edge of lava flow. Transition area from metamorphic rock outcrops to exposed lava flow. Level ground. On road to Agri, 25km W of Dogubayazit. At Seshat roadside restaurant, Agri Province. latitude: 39 deg. 35 min. N. longitude: deq. 48 min. E. elevation: 1710m. remarks: Tir wheat sown with Tir sowing machine. Soil pH 7.60. Seed white, awned, awns brown. Glumes brown, pubescent. Originally collected in random sample of color morphs including TU85-088-01-1, TU85-088-01-3, TU85-088-01-4, TU85-088-01-5, TU85-088-01-6, and TU85-088-01-7. Cultivated. Seed.
- donor id: TU85-088-01-3. origin: Turkey. collected: PI 560692 August 16, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-088-01. locality: Non-irrigated wheat field at edge of lava flow. Transition area from metamorphic rock outcrops to exposed lava flow. Level ground. On road to Agri, 25km W of Dogubayazit. At Seshat roadside restaurant, Agri Province. latitude: 39 deg. 35 min. N. longitude: deq. 48 min. E. elevation: 1710m. remarks: Tir wheat sown with Tir sowing machine. Soil pH 7.60. Seed white, awned, awns and glumes black and white. Glumes pubescent, blunt beaks. Originally collected in random sample of color morphs including TU85-088-01-1, TU85-088-01-2, TU85-088-01-4, TU85-088-01-5, TU85-088-01-6, and TU85-088-01-7. Cultivated. Seed.

- PI 560693 donor id: TU85-088-01-4. origin: Turkey. collected:
  August 16, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-088-01. locality:
  Non-irrigated wheat field at edge of lava flow.
  Transition area from metamorphic rock outcrops to exposed lava flow. Level ground. On road to Agri, 25km W of Dogubayazit. At Seshat roadside restaurant, Agri
  Province. latitude: 39 deg. 35 min. N. longitude: 43 deg. 48 min. E. elevation: 1710m. remarks: Tir wheat sown with Tir sowing machine. Soil pH 7.60. Seed white, awned, awns white. Glumes white, pubescent, blunt beaks. Originally collected in random sample of color morphs including TU85-088-01-1, TU85-088-01-2, TU85-088-01-3, TU85-088-01-5, TU85-088-01-6, and TU85-088-01-7. Cultivated. Seed.
- donor id: TU85-088-01-5. origin: Turkey. collected: PI 560694 August 16, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-088-01. locality: Non-irrigated wheat field at edge of lava flow. Transition area from metamorphic rock outcrops to exposed lava flow. Level ground. On road to Agri, 25km W of Dogubayazit. At Seshat roadside restaurant, Agri Province. latitude: 39 deg. 35 min. N. longitude: deq. 48 min. E. elevation: 1710m. remarks: Tir wheat sown with Tir sowing machine. Soil pH 7.60. Seed white, awned, awns white. Glumes white, pubescent, sharp beaks. Originally collected in random sample of color morphs including TU85-088-01-1, TU85-088-01-2, TU85-088-01-3, TU85-088-01-4, TU85-088-01-6, and TU85-088-01-7. Cultivated. Seed.
- PI 560695 donor id: TU85-088-01-6. origin: Turkey. collected:
  August 16, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-088-01. locality:
  Non-irrigated wheat field at edge of lava flow.
  Transition area from metamorphic rock outcrops to exposed lava flow. Level ground. On road to Agri, 25km W of Dogubayazit. At Seshat roadside restaurant, Agri Province. latitude: 39 deg. 35 min. N. longitude: 43 deg. 48 min. E. elevation: 1710m. remarks: Tir wheat sown with Tir sowing machine. Soil pH 7.60. Seed red, awned, awns black with white tips. Glumes purple.
  Originally collected in random sample of color morphs including TU85-088-01-1, TU85-088-01-2, TU85-088-01-3, TU85-088-01-4, TU85-088-01-5, and TU85-088-01-7. Cultivated. Seed.

PI 560696

donor id: TU85-088-01-7. origin: Turkey. collected:
August 16, 1985. collector: C.R. Sperling, D. Eser, H.H.
Gecit. collector id: TU85-088-01. locality:
Non-irrigated wheat field at edge of lava flow.
Transition area from metamorphic rock outcrops to exposed lava flow. Level ground. On road to Agri, 25km W of Dogubayazit. At Seshat roadside restaurant, Agri Province. latitude: 39 deg. 35 min. N. longitude: 43 deg. 48 min. E. elevation: 1710m. remarks: Tir wheat sown with Tir sowing machine. Soil pH 7.60. Seed red, awned, awns brown. Glumes brown, pubescent. Originally collected in random sample of color morphs including TU85-088-01-1, TU85-088-01-2, TU85-088-01-3, TU85-088-01-4, TU85-088-01-5, and TU85-088-01-7. Cultivated. Seed.

PI 560697. Triticum dicoccoides (Korn. ex Aschers. & Graebn.) Aarons. POACEAE Wild emmer

Donated by: Ankara University, Ankara, Turkey; and Sperling, C.R., Agricultural Research Service -- USDA, National Germplasm Resources Lab., Rm. 329, Bldg. 001, BARC-West, Beltsville, Maryland 20705-2350, United States. remarks: A USDA sponsored collection in cooperation with Oregon State University and IBPGR. Received January 1986.

donor id: TU85-016-01. origin: Turkey. collected: July 15, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-016-01. locality: Open oak forest area. Limestone outcrops on S and W side of road. Scattered large oak trees. Rocky roadside bank, grassy, grazed portion adjacent to open oak forest, 13km W of Sirnak, Siirt Province. latitude: 37 deg. 35 min. N. longitude: 42 deg. 23 min. E. elevation: 1160m. remarks: Associated plants: Ae. speltoides, Hordeum spontaneum. Wild. Seed.

PI 560698 to 560718. Triticum durum Desf. POACEAE Durum wheat

Donated by: Ankara University, Ankara, Turkey; and Sperling, C.R., Agricultural Research Service -- USDA, National Germplasm Resources Lab., Rm. 329, Bldg. 001, BARC-West, Beltsville, Maryland 20705-2350, United States. remarks: A USDA sponsored collection in cooperation with Oregon State University and IBPGR. Received January 1986.

DI 560698 donor id: TU85-008-07-1. origin: Turkey. collected:

June 20, 1985. collector: C.R. Sperling, H.H. Gecit.

collector id: TU85-008-07. locality: Cultivated wheat

field. Just over bridge on road to Eruh, N side of road.

Billoris village area. Fine soil near riverbank, grazed,

S of Siirt, Siirt Province. latitude: 37 deg. 49 min. N.

longitude: 41 deg. 52 min. E. elevation: 560m.

remarks: Together with TU85-008-07-2 and TU85-008-12

(which looks the same except 008-07 has a dense spike),

comprising about 15% of wheat in this mixed field. Hand

sown. Grown with TU85-008-08, 008-10, 008-12, 008-13 and

T. aestivum (008-09 and 008-11). Seed amber, awned, awns

tan. Glumes tan, non-pubescent. Originally collected in

same sample with TU85-008-07-2. Cultivated. Seed.

DI 560699 donor id: TU85-008-07-2. origin: Turkey. collected:
June 20, 1985. collector: C.R. Sperling, H.H. Gecit.
collector id: TU85-008-07. locality: Cultivated wheat
field. Just over bridge on road to Eruh, N side of road.
Billoris village area. Fine soil near riverbank, grazed,
S of Siirt, Siirt Province. latitude: 37 deg. 49 min. N.
longitude: 41 deg. 52 min. E. elevation: 560m.
remarks: Together with TU85-008-07-1 and TU85-008-12
(which looks the same except 008-07 has a dense spike),
comprising about 15% of wheat in this mixed field. Hand
sown. Grown with TU85-008-08, 008-10, 008-12, 008-13 and
T. aestivum (008-09 and 008-11). Originally collected in
same sample with TU85-008-07-1. Cultivated. Seed.

PI 560700 donor id: TU85-008-08. origin: Turkey. collected: June 20, 1985. collector: C.R. Sperling, H.H. Gecit. collector id: TU85-008-08. locality: Cultivated wheat field. Just over bridge on road to Eruh, N side of road. Billoris village area. Fine soil near riverbank, grazed, S of Siirt, Siirt Province. latitude: 37 deg. 49 min. N. longitude: 41 deg. 52 min. E. elevation: 560m. remarks: Same as TU85-008-10, together comprising about 50% of the wheat in this field. Hand sown. Grown with TU85-008-07, 008-10, 008-12, 008-13 and T. aestivum (008-09 and 008-11). Seed amber, awned, awns black. Glumes white, non-pubescent. Cultivated. Seed.

- donor id: TU85-008-10-1. origin: Turkey. collected: PI 560701 June 20, 1985. collector: C.R. Sperling, H.H. Gecit. collector id: TU85-008-10-1. locality: Cultivated wheat field. Just over bridge on road to Eruh, N side of road, Billoris village area. Fine soil near riverbank, grazed, S of Siirt. Siirt Province. latitude: 37 deg. 49 min. N. longitude: 41 deg. 52 min. E. elevation: 560m. remarks: Together with TU85-008-08 (which is the same), TU85-088-10-2, and TU85-008-10-3 comprising about 50% of the wheat in this field. Hand sown. Grown with TU85-008-07, 008-08, 008-12, 008-13, and T. aestivum (008-09 and 008-11). Seed amber, awned, awns black. Glumes white, non-pubescent. Spike density 4. Originally collected in same sample with TU85-008-10-2 and TU85-008-10-3. Cultivated. Seed.
- donor id: TU85-008-10-2. origin: Turkey. collected: PI 560702 June 20, 1985. collector: C.R. Sperling, H.H. Gecit. collector id: TU85-008-10. locality: Cultivated wheat field. Just over bridge on road to Eruh, N side of road. Billoris village area. Fine soil near riverbank, grazed, S of Siirt, Siirt Province. latitude: 37 deg. 49 min. N. longitude: 41 deg. 52 min. E. elevation: 560m. remarks: Together with TU85-008-08 (which is the same) and TU85-008-10-1 and TU85-008-10-3 comprising about 50% of the wheat in this field. Hand sown. Grown with TU85-008-07, 008-08, 008-12, 008-13 and T. aestivum (008-09 and 008-11). Seed amber, awned, awns black. Glumes white, non-pubescent. Spike density 7. Originally collected in same sample with TU85-008-10-1 and TU85-008-10-3. Cultivated. Seed.
- donor id: TU85-008-10-3. origin: Turkey. collected: PI 560703 June 20, 1985. collector: C.R. Sperling, H.H. Gecit. collector id: TU85-008-10. locality: Cultivated wheat field. Just over bridge on road to Eruh, N side of road. Billoris village area. Fine soil near riverbank, grazed, S of Siirt, Siirt Province. latitude: 37 deg. 49 min. N. longitude: 41 deg. 52 min. E. elevation: 560m. remarks: Together with TU85-008-08 (which is the same) and TU85-008-10-1 and TU85-008-10-2 comprising about 50% of the wheat in this field. Hand sown. Grown with TU85-008-07, 008-08, 008-12, 008-13 and T. aestivum (008-09 and 008-11). Seed red, awned, awns black. Glumes white, non-pubescent. Spike density 7. Originally collected in same sample with TU85-008-10-1 and TU85-008-10-2. Cultivated. Seed.

- PI 560704 donor id: TU85-008-12. origin: Turkey. collected: June 20, 1985. collector: C.R. Sperling, H.H. Gecit. collector id: TU85-008-12. locality: Cultivated wheat field. Just over bridge on road to Eruh, N side of road. Billoris village area. Fine soil near riverbank, grazed, S of Siirt, Siirt Province. latitude: 37 deg. 49 min. N. longitude: 41 deg. 52 min. E. elevation: 560m. remarks: Spike red, same as TU85-008-07, together comprising 15% of the wheat in this mixed field. Grown with TU85-008-07, 008-08, 008-10, 008-13 and T. aestivum (008-09 and 008-11). Hand sown. Awned, awns tan. Glumes tan, non-pubescent. Spike density 6. Cultivated. Seed.
- PI 560705 donor id: TU85-008-13. origin: Turkey. collected: June 20, 1985. collector: C.R. Sperling, H.H. Gecit. collector id: TU85-008-13. locality: Cultivated wheat field. Just over bridge on road to Eruh, N side of road. Billoris village area. Fine soil near riverbank, grazed, S of Siirt, Siirt Province. latitude: 37 deg. 49 min. N. longitude: 41 deg. 52 min. E. elevation: 560m. remarks: Spike white, comprising 15% of the wheat in this mixed field. Grown with TU85-008-07, 008-08, 008-10, 008-12 and T. aestivum (008-09 and 008-11). Hand sown. Seed amber, awned, awns white. Glumes white, glabrous. Spike density 6. Cultivated. Seed.
- PI 560706 donor id: TU85-015-01-1. origin: Turkey. collected:
  July 15, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-015-01. locality: Rocky,
  limestone wheat field. Oak scrub region, 2km W of Eruh on
  S side of road, Siirt Province. latitude: 37 deg. 45
  min. N. longitude: 42 deg. 10 min. E. elevation:
  l100m. remarks: Planted October-November, harvested
  July. Hand sown. Seed amber, awned, awns tan. Glumes tan,
  non-pubescent. Originally collected in a random sample
  also including TU85-015-01-2, TU85-015-01-3 and Triticum
  aestivum (TU85-015-01-4, TU95-015-01-5 and
  TU85-015-01-6). Cultivated. Seed.
- PI 560707 donor id: TU85-015-01-2. origin: Turkey. collected:
  July 15, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-015-01. locality: Rocky,
  limestone wheat field. Oak scrub region, 2km W of Eruh on
  S side of road, Siirt Province. latitude: 37 deg. 45
  min. N. longitude: 42 deg. 10 min. E. elevation:
  l100m. remarks: Planted October/November, harvested
  July. Hand sown. Seed amber, awned, awns white. Glumes
  white, non-pubescent. Originally collected in a random
  sample also including TU85-015-01-1, TU85-015-01-3 and
  Triticum aestivum (TU85-015-01-4, TU85-015-01-5 and
  TU85-015-01-6). Cultivated. Seed.

- PI 560708 donor id: TU85-015-01-3. origin: Turkey. collected:
  July 15, 1985. collector: C.R. Sperling, D. Eser, H.H.

  Gecit. collector id: TU85-015-01. locality: Rocky,
  limestone wheat field. Oak scrub region, 2km W of Eruh on
  S side of road, Siirt Province. latitude: 37 deg. 45

  min. N. longitude: 42 deg. 10 min. E. elevation:
  l100m. remarks: Planted October/November, harvested
  July. Hand sown. Seed amber, awned, awns tan. Glumes tan,
  non-pubescent. Spike very short. Originally collected in
  a random sample also including TU85-015-01-1,
  TU85-015-01-2 and Triticum aestivum (TU85-015-01-4,
  TU85-015-01-5 and TU85-015-01-6). Cultivated. Seed.
- DI 560709 donor id: TU85-017-01-03. origin: Turkey. collected:
  July 15, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-017-01. locality: Collected
  from threshing pile of mixed varieties before threshing.
  Open oak wood area, 15km E of Sirnak, Siirt Province.
  latitude: 37 deg. 29 min. N. longitude: 42 deg. 33 min.
  E. elevation: 1370m. remarks: Seed amber, awned, awns
  white. Glumes white, non-pubescent. Originally collected
  in same sample as TU85-017-01-5, TU85-017-01-6,
  TU85-017-01-7, TU85-017-01-8, TU85-017-01-9,
  TU85-017-01-10 and T. aestivum (TU85-017-01-1,
  TU85-017-01-2, TU85-017-01-4, and TU85-017-01-11).
  Cultivated. Seed.
- PI 560710 donor id: TU85-017-01-05. origin: Turkey. collected:
  July 15, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-017-01. locality: Collected
  from threshing pile of mixed varieties before threshing.
  Open oak wood area, 15km E of Sirnak, Siirt Province.
  latitude: 37 deg. 29 min. N. longitude: 42 deg. 33 min.
  E. elevation: 1370m. remarks: Seed amber, awned, awns
  tan. Glumes tan, non-pubescent. Originally collected in
  same sample as TU85-017-01-3, TU85-017-01-6,
  TU85-017-01-7, TU85-017-01-8, TU85-017-01-9,
  TU85-017-01-10 and T. aestivum (TU85-017-01-1,
  TU85-017-01-2, TU85-017-01-4, and TU85-017-01-11).
  Cultivated. Seed.

- DI 560711 donor id: TU85-017-01-06. origin: Turkey. collected:
  July 15, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-017-01. locality: Collected
  from threshing pile of mixed varieties before threshing.
  Open oak wood area, 15km E of Sirnak, Siirt Province.
  latitude: 37 deg. 29 min. N. longitude: 42 deg. 33 min.
  E. elevation: 1370m. remarks: Seed amber, awned, awns
  black. Glumes tan, non-pubescent. Originally collected in
  same sample as TU85-017-01-3, TU85-017-01-5,
  TU85-017-01-7, TU85-017-01-8, TU85-017-01-9,
  TU85-017-01-10 and T. aestivum (TU85-017-01-1,
  TU85-017-01-2, TU85-017-01-4, and TU85-017-01-11).
  Cultivated. Seed.
- PI 560712 donor id: TU85-017-01-07. origin: Turkey. collected:
  July 15, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-017-01. locality: Collected
  from threshing pile of mixed varieties before threshing.
  Open oak wood area, 15km E of Sirnak, Siirt Province.
  latitude: 37 deg. 29 min. N. longitude: 42 deg. 33 min.
  E. elevation: 1370m. remarks: Seed red, awned, awns
  tan. Glumes tan, non-pubescent. Originally collected in
  same sample as TU85-017-01-3, TU85-017-01-5,
  TU85-017-01-6, TU85-017-01-8, TU85-017-01-1,
  TU85-017-01-10 and T. aestivum (TU85-017-01-1).
  Cultivated. Seed.
- PI 560713 donor id: TU85-017-01-08. origin: Turkey. collected:
  July 15, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-017-01. locality: Collected
  from threshing pile of mixed varieties before threshing.
  Open oak wood area, 15km E of Sirnak, Siirt Province.
  latitude: 37 deg. 29 min. N. longitude: 42 deg. 33 min.
  E. elevation: 1370m. remarks: Seed amber, awned, awns
  tan. Glumes tan, non-pubescent. Originally collected in
  same sample as TU85-017-01-3, TU85-017-01-5,
  TU85-017-01-6, TU85-017-01-7, TU85-017-01-9,
  TU85-017-01-10 and T. aestivum (TU85-017-01-1,
  TU85-017-01-2, TU85-017-01-4, and TU85-017-01-11).
  Cultivated. Seed.

- PI 560714 donor id: TU85-017-01-09. origin: Turkey. collected:
  July 15, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-017-01. locality: Collected
  from threshing pile of mixed varieties before threshing.
  Open oak wood area, 15km E of Sirnak, Siirt Province.
  latitude: 37 deg. 29 min. N. longitude: 42 deg. 33 min.
  E. elevation: 1370m. remarks: Seed amber, awned, awns
  tan. Glumes tan, non-pubescent. Originally collected in
  same sample as TU85-017-01-3, TU85-017-01-5,
  TU85-017-01-6, TU85-017-01-7, TU85-017-01-1,
  TU85-017-01-10 and T. aestivum (TU85-017-01-1).
  Cultivated. Seed.
- PI 560715 donor id: TU85-017-01-10. origin: Turkey. collected:
  July 15, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-017-01. locality: Collected
  from threshing pile of mixed varieties before threshing.
  Open oak wood area, 15km E of Sirnak, Siirt Province.
  latitude: 37 deg. 29 min. N. longitude: 42 deg. 33 min.
  E. elevation: 1370m. remarks: Seed amber, awned, awns
  black. Glumes white, pubescent. Originally collected in
  same sample as TU85-017-01-3, TU85-017-01-5,
  TU85-017-01-6, TU85-017-01-7, TU85-017-01-1,
  TU85-017-01-9 and T. aestivum (TU85-017-01-1).
  Cultivated. Seed.
- donor id: TU85-054-01-1. origin: Turkey. collected: PI 560716 July 31, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-054-01. locality: Cultivated T. durum field planted with Tir planter. Rolling land. Fine grained soil, 7km SE of Ovakisla, Bitlis Province. latitude: 38 deq. 46 min. N. longitude: 42 deq. 22 min. elevation: 1770m. remarks: Together with TU85-054-01-2 comprising 85-90% of field. Growing mixed with TU85-054-02, T. aestivum (054-03 and 054-06) and rye (054-04 and 054-05). T. aestivum and rye are contaminants. Only field of T. durum seen here, may have been fertilized. Soil pH 7.60. Seed amber, awned, awns black. Glumes white, non-pubescent. Spike density 6. Originally collected in same sample with TU85-054-01-2. Cultivated. Seed.

- DI 560717 donor id: TU85-054-01-2. origin: Turkey. collected:
  July 31, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-054-01. locality: Cultivated
  T. durum field planted with Tir planter. Rolling land.
  Fine grained soil, 7km SE of Ovakisla, Bitlis Province.
  latitude: 38 deg. 46 min. N. longitude: 42 deg. 22 min.
  E. elevation: 1770m. remarks: Together with
  TU85-054-01-1 comprising 85-90% of field. Growing mixed
  with TU85-054-02, T. aestivum (054-03 and 054-06) and rye
  (054-04 and 054-05). T. aestivum and rye are
  contaminants. Only field of T. durum seen here, may have
  been fertilized. Soil pH 7.60. Seed amber, awned, awns
  brown. Glumes brown, non-pubescent. Spike density 6.
  Originally collected in same sample with TU85-054-01-1.
  Cultivated. Seed.
- PI 560718 donor id: TU85-054-02. origin: Turkey. collected: July 31, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-054-02. locality: Cultivated T. durum field planted with Tir planter. Rolling land. Fine grained soil, 7km SE of Ovakisla, Bitlis Province. latitude: 38 deg. 46 min. N. longitude: 42 deg. 22 min. E. elevation: 1770m. remarks: 2% of field. Growing mixed with TU85-054-01, T. aestivum (054-03 and 054-06) and rye (054-04 and 054-05). T. aestivum and rye are contaminants. Only field of T. durum seen here, may have been fertilized. Soil pH 7.60. Seed amber, awned, awns brown. Glumes brown, non-pubescent. Cultivated. Seed.

#### PI 560719 to 560729. Triticum monococcum L. POACEAE

Donated by: Ankara University, Ankara, Turkey; and Sperling, C.R., Agricultural Research Service -- USDA, National Germplasm Resources Lab., Rm. 329, Bldg. 001, BARC-West, Beltsville, Maryland 20705-2350, United States. remarks: A USDA sponsored collection in cooperation with Oregon State University and IBPGR. Received January 1986.

PI 560719 donor id: TU85-010-02. origin: Turkey. collected: June 20, 1985. collector: C.R. Sperling, H.H. Gecit. collector id: TU85-010-02. locality: Steep N facing slope of rocky, hard limestone outcrops. Heavily grazed and much bare ground, 4.2km W of jct roads Diyarbakir-Siirt and Siirt-Bitlis, Siirt Province. latitude: 37 deg. 58 min. N. longitude: 41 deg. 43 min. E. elevation: 880m. remarks: Base of hill in disturbed soil among small rocks. Sperling Herbarium Voucher no. 6733. Wild. Seed.

- PI 560720 donor id: TU85-011-02. origin: Turkey. collected: July 13, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-011-02. locality: Dirt roadside and field margin of T. aestivum (Lance wheat). Flat floodplain area, fine soil. Alpasian Devieturetme Ciftlig (Alpaslan St. Ag. Farm). Edge of wheat field, 13km E and N of hwy, Mus Province. latitude: 38 deg. 49 min. N. longitude: 41 deg. 35 min. E. elevation: 1260m. remarks: Taller than wheat. Random germplasm. Plants in field mature. Plants on edge of road green. Sperling Herbarium Voucher no. 6742. Wild. Seed.
- PI 560721 donor id: TU85-015-03. origin: Turkey. collected: July 15, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-015-03. locality: Rocky, limestone field. Oak scrub region, 2km W of Eruth on S side of road, Siirt Province. latitude: 37 deg. 45 min. N. longitude: 42 deg. 10 min. E. elevation: 1100m. remarks: Occasional in field, but more common in grassy areas adjacent to field. White to black spikes. Not found in bare soil. Random sample. Planted in October/November, harvested in July. Wheat hand sown. Wild. Seed.
- PI 560722 donor id: TU85-034-02. origin: Turkey. collected: July 22, 1985. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU85-034-02. locality: Irrigated field. Low ground along Lake Van, 2km NE of Yayliyaka, Van Province. latitude: 38 deg. 50 min. N. longitude: 43 deg. 24 min. E. elevation: 1625m. remarks: Infrequent at edge of wheat field. Sperling Herbarium Voucher no. 6799. Wild. Seed.
- PI 560723 donor id: TU85-056-04. origin: Turkey. collected:
  August 01, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-056-04. locality: Grazed E
  slope, stoney soil, weedy Euphorbs, Eryngium. Hard
  limestone-metamorphic rocks (not basalt!). 15km W of
  Adilcevaz, Mus Province. latitude: 38 deg. 46 min. N.
  longitude: 42 deg. 36 min. E. elevation: 1630m.
  remarks: Edge of field and road bank. Fine soil, not
  stoney. About half of spikes shed. Spikes mostly black.
  Dominant cover of Aegilops species. Sperling Herbarium
  Voucher no. 6818. Wild. Seed.

- PI 560724 donor id: TU85-066-02. origin: Turkey. collected:
  August 03, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-066-02. locality: Wheat field edge and adjacent roadbank. Common in stoney soil of roadbank. Region of scattered coppiced oak scrub on hillside, 1 km N of Kazan village, or 6.5km N of Karakale, Mus Province. latitude: 38 deg. 53 min. N.
  longitude: 41 deg. 58 min. E. elevation: 1670m.
  remarks: Some mature spikes black, others white.
  Herbarium material from plants cut off and regrowth.
  Sperling Herbarium Voucher no. 6824. Wild. Seed.
- PI 560725 donor id: TU85-081-03. origin: Turkey. collected:
  August 12, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-081-03. locality: Cemetery,
  ungrazed, 4.4km N of the Mus-Bingol hwy (#60) on road to
  Varto, Serinova village, Mus Province. latitude: 38 deg.
  54 min. N. longitude: 41 deg. 31 min. E. elevation:
  1220m. remarks: Occasional in disturbed soil of
  cemetery. Only a few plants sampled. Wild. Seed.
- PI 560726 donor id: TU85-082-02-1. origin: Turkey. collected:
  August 12, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-082-02. locality: Old fields and at edges of fields where soil was cultivated but not sown. Not in field, 8.6km S of the Hasanova Suyu river crossing (Abdurahmanpasa) on road from Varto to Mus. E slope, somewhat stoney soil, overlook river valley, Mus Prov. latitude: 39 deg. 03 min. N. longitude: 41 deg. 31 min. E. elevation: 1250m. remarks: Random sample of all places where found. Scattered wild Pyrus and Crataegus. Awns and glumes white. Originally collected in same sample with TU85-082-02-2, TU85-082-02-3 and TU85-082-02-4. Wild. Seed.
- PI 560727 donor id: TU85-082-02-2. origin: Turkey. collected:
  August 12, 1985. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU85-082-02. locality: Old fields
  and at edges of fields where soil was cultivated but not
  sown. Not in field, 8.6km S of the Hasanova Suyu river
  crossing (Abdurahmanpasa) on road from Varto to Mus. E
  slope, somewhat stoney soil, overlook river valley, Mus
  Prov. latitude: 39 deg. 03 min. N. longitude: 41 deg.
  31 min. E. elevation: 1250m. remarks: Random sample of
  all places where found. Scattered wild Pyrus and
  Crataegus. Awns and glumes black and white. Originally
  collected in same sample with TU85-082-02-1,
  TU85-082-02-3, and TU85-082-02-4. Wild. Seed.

PI 560728 donor id: TU85-082-02-3. origin: Turkey. collected:
August 12, 1985. collector: C.R. Sperling, D. Eser, H.H.
Gecit. collector id: TU85-082-02. locality: Old fields and at edges of fields where soil was cultivated but not sown. Not in field, 8.6km S of the Hasanova Suyu river crossing (Abdurahmanpasa) on road from Varto to Mus. E slope, somewhat stoney soil, overlook river valley, Mus Prov. latitude: 39 deg. 03 min. N. longitude: 41 deg. 31 min. E. elevation: 1250m. remarks: Random sample of all places where found. Scattered wild Pyrus and Crataegus. Awns and glumes black and white. Originally collected in same sample with TU85-082-02-1, TU85-082-02-2, and TU85-082-02-4. Wild. Seed.

PI 560729 donor id: TU85-082-02-4. origin: Turkey. collected:
August 12, 1985. collector: C.R. Sperling, D. Eser, H.H.
Gecit. collector id: TU85-082-02. locality: Old fields and at edges of fields where soil was cultivated but not sown. Not in field, 8.6km S of the Hasanova Suyu river crossing (Abdurahmanpasa) on road from Varto to Mus. E slope, somewhat stoney soil, overlook river valley, Mus Prov. latitude: 39 deg. 03 min. N. longitude: 41 deg. 31 min. E. elevation: 1250m. remarks: Random sample of all places where found. Scattered wild Pyrus and Crataegus. Awns and glumes white. Originally collected in same sample with TU85-082-02-1, TU85-082-02-2, and TU85-082-02-3. Wild. Seed.

PI 560730. Aegilops biuncialis Vis. POACEAE

Donated by: Ankara University, Ankara, Turkey; and Sperling, C.R., Agricultural Research Service -- USDA, National Germplasm Services Lab., Rm. 329, Bldg. 001, BARC-West, Beltsville, Maryland 20705-2350, United States. remarks: A USDA sponsored collection in cooperation with Oregon State University and IBPGR. Received October 15, 1989.

donor id: TU86-21-03-2. origin: Turkey. collected: July
10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit.
collector id: TU86-21-03. locality: Coppiced
Quercus/Pistacia trees among small grain fields on S
slope, hard limestone outcrops present, soils red, 8.2km
E of Eruh on Eruh-Sirnak road, Siirt Province. latitude:
37 deg. 44 min. N. longitude: 42 deg. 15 min. E.
elevation: 1140m. remarks: Weedy in old fields.
Originally collected in same sample with A. triuncialis
(TU86-21-03-1). Wild. Seed.

PI 560731 to 560732. Aegilops markgrafii (Greuter) K. Hammer var. markgrafii POACEAE

Donated by: Ankara University, Ankara, Turkey; and Sperling, C.R., Agricultural Research Service -- USDA, National Germplasm Services Lab., Rm. 329, Bldg. 001, BARC-West, Beltsville, Maryland 20705-2350, United States. remarks: A USDA sponsored collection in cooperation with Oregon State University and IBPGR. Received October 15, 1989.

- PI 560731 donor id: TU86-23-06. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-23-06. locality: Heavily grazed area with hard limestone outcrops, scattered Acer, Quercus and Crataegus, 23.5km E of Eruh on Eruh-Sirnak road (5km E of highest pass on road), Siirt Province. latitude: 37 deg. 38 min. N. longitude: 42 deg. 21 min. E. elevation: 1410m. remarks: In grazed areas. received as: A. caudata. Wild. Seed.
- PI 560732 donor id: TU86-31-02. origin: Turkey. collected: July 12, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-31-02. locality: Grazed scrub oak forest on rocky outcrops, 29km S of Bitlis on Bitlis-Baykan road, then 6km SE on road to Konalga (about 1 km SW of Kayalibal village), Bitlis Province. latitude: 38 deg. 12 min. N. longitude: 41 deg. 56 min. E. elevation: 1370m. remarks: Disturbed soil among rocks. received as: A. caudata. Wild. Seed.
- PI 560733 to 560740. Aegilops cylindrica Host POACEAE

Donated by: Ankara University, Ankara, Turkey; and Sperling, C.R., Agricultural Research Service -- USDA, National Germplasm Services Lab., Rm. 329, Bldg. 001, BARC-West, Beltsville, Maryland 20705-2350, United States. remarks: A USDA sponsored collection in cooperation with Oregon State University and IBPGR. Received October 15, 1989.

PI 560733 donor id: TU86-08-01. origin: Turkey. collected: July 03, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-08-01. locality: Steep W facing grazed slope along road, 2.5km N of road junction to Beytussebap on Cukurca-Hakkari road, Hakkari Province. latitude: 37 deg. 29 min. N. longitude: 43 deg. 32 min. E. elevation: 1080m. remarks: Common. Sperling Herbarium Voucher no. 6869. Wild. Seed.

- PI 560734 donor id: TU86-09-03. origin: Turkey. collected: July 03, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-09-03. locality: Rocky slopes and open oak scrub, steep S facing slope above Zap River, 1.5km SW of Gimenli on Hakkari-Cukurca road, Hakkari Province. latitude: 37 deg. 29 min. N. longitude: 43 deg. 38 min. E. elevation: 1150m. remarks: Growing in loose rocky rubble and grazed areas. Wild. Seed.
- PI 560735 donor id: TU86-11-01. origin: Turkey. collected: July 04, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-11-01. locality: Quercus/Pistacia forest on steep rocky slopes at Zap River crossing in village of Cemenli, 24.5km S of Hakkari on road to Cukurca, Hakkari Province. latitude: 37 deg. 29 min. N. longitude: 43 deg. 39 min. E. elevation: 1150m. remarks: Open grazed areas and semi-shade in loose rubble. Spikes pubescent. Wild. Seed.
- PI 560736 donor id: TU86-12-03. origin: Turkey. collected: July 05, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-12-03. locality: Cultivated wheat field and field margin, 4.4km S of road junction to Yuksekova on Hakkari-Van road, Hakkari Province. latitude: 37 deg. 43 min. N. longitude: 44 deg. 01 min. E. elevation: 1490m. remarks: In fine soil at edge of wheat field. Common. Wild. Seed.
- PI 560737 donor id: TU86-34-04. origin: Turkey. collected: July 16, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-34-04. locality: Open oak scrub forest on steep south facing scree slope above Pesan River, 2.6km N of Tekeli on road to Semdinli, Hakkari Province. latitude: 37 deg. 15 min. N. longitude: 44 deg. 39 min. E. elevation: 1430m. remarks: Growing in scree along roadside, not on slope. Weedy. Sperling Herbarium Voucher no. 6880. Wild. Seed.
- PI 560738 donor id: TU86-36-01. origin: Turkey. collected: July 17, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-36-01. locality: Steep S facing grazed slope above military base, region of Quercus/Pistacia scrub forest, Bembo village, 13.8km W of Yuksekova-Semdinli road, Hakkari Province. latitude: 37 deg. 23 min. N. longitude: 44 deg. 27 min. E. elevation: 1440m. remarks: Common in full sun. Wild. Seed.

# PI 560733 to 560740-continued

PI 560739 donor id: TU86-40-01. origin: Turkey. collected: July 18, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-40-01. locality: Ungrazed cemetery on knoll with large Pistacia trees and rock outcrop, 0.4km S of Baslik (29.6km S of Hakkari on road to Cukurca, then 5.8km N), Hakkari Province. latitude: 37 deg. 32 min. N. longitude: 43 deg. 36 min. E. elevation: 1460m. remarks: Spikes pubescent. Occasional. Wild. Seed.

PI 560740 donor id: TU86-43-02-1. origin: Turkey. collected: July 19, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-43-02. locality: Grazed E facing slope above Zap river, scattered Ziziphus/Pistacia, 10km S of junction to Yuksekova on Hakkari-Van Road, Hakkari Province. latitude: 37 deg. 42 min. N. longitude: 43 deg. 58 min. E. elevation: 1450m. remarks: Common. Originally collected in same sample as A. triuncialis (TU86-43-02-2). Wild. Seed.

## PI 560741. Aegilops geniculata Roth POACEAE

Donated by: Ankara University, Ankara, Turkey; and Sperling, C.R., Agricultural Research Service -- USDA, National Germplasm Services Lab., Rm. 329, Bldg. 001, BARC-West, Beltsville, Maryland 20705-2350, United States. remarks: A USDA sponsored collection in cooperation with Oregon State University and IBPGR. Received October 15, 1989.

donor id: TU86-27-05-2. origin: Turkey. collected: July 11, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-27-05. locality: Grazed open oak woods on rocky outcrop, 3km NW of Kozluk, on road to Gumusorgu, Siirt Province. latitude: 38 deg. 01 min. N. longitude: 41 deg. 27 min. E. elevation: 1000m. remarks: Common, in disturbed soil. Originally collected in same sample as A. umbellulata (TU86-27-05-1). received as: A. umbellulata. Wild. Seed.

# PI 560742. Aegilops hybrid POACEAE

Donated by: Ankara University, Ankara, Turkey; and Sperling, C.R., Agricultural Research Service -- USDA, National Germplasm Services Lab., Rm. 329, Bldg. 001, BARC-West, Beltsville, Maryland 20705-2350, United States. remarks: A USDA sponsored collection in cooperation with Oregon State University and IBPGR. Received October 15, 1989.

### PI 560742-continued

donor id: TU86-23-05-3. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-23-05. locality: Heavily grazed area, hard limestone outcrops with scattered Acer, Quercus and Crataegus, 23.5km E of Eruh on Eruh-Sirnak road (5km E of the highest pass on road), Siirt Province. latitude: 37 deg. 38 min. N. longitude: 42 deg. 21 min. E. elevation: 1410m. remarks: In grazed areas. Originally collected in same sample as A. neglecta (TU86-23-05-1) and A. columnaris (TU86-23-05-2). Wild. Seed.

PI 560743 to 560746. Aegilops neglecta Req. ex Bertol. POACEAE

Donated by: Ankara University, Ankara, Turkey; and Sperling, C.R., Agricultural Research Service -- USDA, National Germplasm Services Lab., Rm. 329, Bldg. 001, BARC-West, Beltsville, Maryland 20705-2350, United States. remarks: A USDA sponsored collection in cooperation with Oregon State University and IBPGR. Received October 15, 1989.

- PI 560743 donor id: TU86-13-05. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-13-05. locality: Region of open oak forest (some juniper), some fields and grazed slopes, 4.7km E of road junction to Sirvan on Siirt-Pervari road, S side of road, Siirt Province. latitude: 38 deg. 02 min. N. longitude: 42 deg. 05 min. E. elevation: 950m. remarks: On grazed slopes, infrequent here. Wild. Seed.
- PI 560744 donor id: TU86-21-05. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-21-05. locality: Coppiced Quercus/Pistacia trees among small grain fields on S slope, hard limestone outcrops present, soils red, 8.2km E of Eruh on Eruh-Sirnak road, Siirt Province. latitude: 37 deg. 44 min. N. longitude: 42 deg. 15 min. E. elevation: 1140m. remarks: Weedy. Wild. Seed.
- donor id: TU86-23-05-1. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-23-05. locality: Heavily grazed area, hard limestone outcrops with scattered Acer, Quercus and Crataegus, 23.5km E of Eruh on Eruh-Sirnak road (5km E of highest pass on road), Siirt Province. latitude: 37 deg. 38 min. N. longitude: 42 deg. 21 min. E. elevation: 1410m. remarks: In grazed area. Originally collected in same sample as A. columnaris (TU86-23-05-2) and A. hybrid (TU86-23-05-3). Wild. Seed.

### PI 560743 to 560746-continued

- PI 560746 donor id: TU86-27-07-1. origin: Turkey. collected: July 11, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-27-07. locality: Grazed open oak woods on rocky outcrops, 3km NW of Kozluk on road to Gumusorgu, Siirt Province. latitude: 38 deg. 01 min. N. longitude: 41 deg. 27 min. E. elevation: 1000m. remarks: In disturbed soil. Originally collected in same sample as A. biuncialis (TU86-27-07-2). Wild. Seed.
- PI 560747 to 560752. Aegilops speltoides Tausch var. speltoides POACEAE

Donated by: Ankara University, Ankara, Turkey; and Sperling, C.R., Agricultural Research Service -- USDA, National Germplasm Services Lab., Rm. 329, Bldg. 001, BARC-West, Beltsville, Maryland 20705-2350, United States. remarks: A USDA sponsored collection in cooperation with Oregon State University and IBPGR. Received October 15, 1989.

- PI 560747 donor id: TU86-13-02. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-13-02. locality: Region of open oak forest (some juniper), some fields and grazed slopes, 4.7km E of road junction to Sirvan on Siirt-Pervari road, S side of road, Siirt Province. latitude: 38 deg. 02 min. N. longitude: 42 deg. 05 min. E. elevation: 950m. remarks: Common in field margins, grazed slopes. Becoming dominant in old fields. Wild. Seed.
- PI 560748 donor id: TU86-15-01. origin: Turkey. local name: Hanuk or Sipir. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-15-01. locality: Region of open oak forests and fields with outcrops of hard limestone, 5km E of Umurlu village, on Siirt-Pervari road, Siirt Province. latitude: 37 deg. 56 min. N. longitude: 42 deg. 16 min. E. elevation: 1020m. remarks: Common in field margin and disturbed sites. Weedy. Whole spike dehiscent. Wild. Seed.
- PI 560749 donor id: TU86-19-04. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-19-04. locality: Ungrazed cemetery with large uncut oaks, hard limestone outcrops present, 6km W of Uzumluk village (Paris) on Siirt-Eruh road, Siirt Province. latitude: 37 deg. 47 min. N. longitude: 42 deg. 03 min. E. elevation: 760m. remarks: Common. In full sun. Wild. Seed.

## PI 560747 to 560752-continued

- PI 560750 donor id: TU86-21-06. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-21-06. locality: Coppiced Quercus/Pistacia trees among small grain fields on S slope, hard limestone outcrops present, soils red, 8.2km E of Eruh on Eruh-Sirnak road, Siirt Province. latitude: 37 deg. 44 min. N. longitude: 42 deg. 15 min. E. elevation: 1140m. remarks: Among rocks and in old fields. Wild. Seed.
- PI 560751 donor id: TU86-23-04. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-23-04. locality: Heavily grazed, hard limestone outcrops with scattered Acer, Quercus and Crataegus, 23.5km E of Eruh on Eruh-Sirnak road (5km E of highest pass of road), Siirt Province. latitude: 37 deg. 38 min. N. longitude: 42 deg. 21 min. E. elevation: 1410m. remarks: In grazed areas. Wild. Seed.
- PI 560752 donor id: TU86-27-06. origin: Turkey. collected: July 11, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-27-06. locality: Grazed open oak woods on rocky outcrops, 3km NW of Kozluk on road to Gumusorgu, Siirt Province. latitude: 38 deg. 01 min. N. longitude: 41 deg. 27 min. E. elevation: 1000m. remarks: Growing in disturbed soil. Wild. Seed.

# PI 560753 to 560756. Aegilops tauschii Cosson POACEAE

Donated by: Ankara University, Ankara, Turkey; and Sperling, C.R., Agricultural Research Service -- USDA, National Germplasm Services Lab., Rm. 329, Bldg. 001, BARC-West, Beltsville, Maryland 20705-2350, United States. remarks: A USDA sponsored collection in cooperation with Oregon State University and IBPGR. Received October 15, 1989.

PI 560753 donor id: TU86-08-03. origin: Turkey. collected: July 03, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-08-03. locality: Steep W facing grazed slope along road, 2.5km N of road junction to Beytussebap on Cukurca-Hakkari road, Hakkari Province. latitude: 37 deg. 29 min. N. longitude: 43 deg. 32 min. E. elevation: 1080m. remarks: Infrequent. received as: A. squarrosa. Wild. Seed.

### PI 560753 to 560756-continued

- PI 560754 donor id: TU86-12-02. origin: Turkey. collected: July 05, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-12-02. locality: Cultivated wheat field and field margin, 4.4km S of road junction to Yuksekova on Hakkari-Van road, Hakkari Province. latitude: 37 deg. 43 min. N. longitude: 44 deg. 01 min. E. elevation: 1490m. remarks: In fine soil at edge of wheat field. Common. received as: A. squarrosa. Wild. Seed.
- PI 560755 donor id: TU86-36-02. origin: Turkey. collected: July 17, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-36-02. locality: Steep S facing grazed slope above military base, region of Quercus/Pistacia scrub forest, Bembo village, 13.8km W of Yuksekova-Semdinli road, Hakkari Province. latitude: 37 deg. 23 min. N. longitude: 44 deg. 27 min. E. elevation: 1440m. remarks: Uncommon. received as: A. squarrosa. Wild. Seed.
- PI 560756 donor id: TU86-43-01. origin: Turkey. collected: July 19, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-43-01. locality: Grazed E facing slope above Zap River, scattered Ziziphus/Pistacia, 10km S of junction to Yuksekova on Hakkari-Van road, Hakkari Province. latitude: 37 deg. 42 min. N. longitude: 43 deg. 58 min. E. elevation: 1450m. remarks: In shade and ungrazed areas beneath spiney Ziziphus shrubs. received as: A. squarrosa. Wild. Seed.
- PI 560757 to 560770. Aeqilops triuncialis L. POACEAE

Donated by: Ankara University, Ankara, Turkey; and Sperling, C.R., Agricultural Research Service -- USDA, National Germplasm Services Lab., Rm. 329, Bldg. 001, BARC-West, Beltsville, Maryland 20705-2350, United States. remarks: A USDA sponsored collection in cooperation with Oregon State University and IBPGR. Received October 15, 1989.

PI 560757 donor id: TU86-05-02. origin: Turkey. collected: July 03, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-05-02. locality: East facing grazed slope, rocky soil, Koprulu Military Base, 20km N of Cukurca on road to Hakkari, Hakkari Province. latitude: 37 deg. 19 min. N. longitude: 43 deg. 30 min. E. elevation: 960m. Wild. Seed.

- PI 560758 donor id: TU86-08-02. origin: Turkey. collected: July 03, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-08-02. locality: Steep W facing grazed slope along road, 2.5km N of road junction to Beytussebap, on Cukurca-Hakkari Road, Hakkari Province. latitude: 37 deg. 29 min. N. longitude: 43 deg. 32 min. E. elevation: 1080m. remarks: Common. Wild. Seed.
- PI 560759 donor id: TU86-09-05. origin: Turkey. collected: July 03, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-09-05. locality: Steep S facing slope above Zap River, rocky slopes and open oak scrub, 1.5km SW of Cemenli on Hakkari-Cukurca road, Hakkari Province. latitude: 37 deg. 29 min. N. longitude: 43 deg. 38 min. E. elevation: 1150m. remarks: Growing in loose rocky rubble and grazed areas. Wild. Seed.
- PI 560760 donor id: TU86-11-03. origin: Turkey. collected: July 04, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-11-03. locality: Quercus/Pistacia forest on steep, rocky slopes, at Zap River crossing in village of Cemenli, 24.5km S of Hakkari on road to Cukurca, Hakkari Province. latitude: 37 deg. 29 min. N. longitude: 43 deg. 39 min. E. elevation: 1150m. remarks: Open grazed areas and semi-shade in loose rubble. Wild. Seed.
- PI 560761 donor id: TU86-13-04. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-13-04. locality: Region of open oak forest (some juniper), some fields and grazed slopes, 4.7km E of road junction to Sirvan on Sirit-Pervari road, S side of road, Siirt Province. latitude: 38 deg. 02 min. N. longitude: 42 deg. 05 min. E. elevation: 950m. remarks: On grazed slopes, common here. Wild. Seed.
- PI 560762 donor id: TU86-19-05. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-19-05. locality: Ungrazed cemetery with large uncut oaks, hard limestone outcrops present, 6km W of Uzumluk village (Paris) on Siirt -Eruh road, Siirt Province. latitude: 37 deg. 47 min. N. longitude: 42 deg. 03 min. E. elevation: 760m. remarks: In full sun. Wild. Seed.

- PI 560763 donor id: TU86-20-04. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-20-04. locality: Ungrazed cemetery with large Quercus and Pistacia, hard limestone outcrops present, 0.4km E of Uzumluk (Paris) village center on Siirt-Eruh road, Siirt Province. latitude: 37 deg. 46 min. N. longitude: 42 deg. 06 min. E. elevation: 920m. Wild. Seed.
- PI 560764 donor id: TU86-21-03-1. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-21-03. locality: Coppiced Quercus/Pistacia trees among small grain fields on S slope, hard limestone outcrops present, soils red, 8.2km E of Eruh on Eruh-Siirt road, Siirt Province. latitude: 37 deg. 44 min. N. longitude: 42 deg. 15 min. E. elevation: 1140m. remarks: Weedy, in old fields. Originally collected in same sample with A. biuncialis (TU86-21-03-2). Wild. Seed.
- PI 560765 donor id: TU86-23-03. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-23-03. locality: Heavily grazed, hard limestone outcrops with scattered Acer, Quercus and Crataegus, 23.5km E of Eruh on Eruh-Sirnak road, (5km E of highest pass on road), Siirt Province. latitude: 37 deg. 38 min. N. longitude: 42 deg. 21 min. E. elevation: 1410m. remarks: In grazed areas. Wild. Seed.
- PI 560766 donor id: TU86-27-04. origin: Turkey. collected: July 11, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-27-04. locality: Grazed open oak woods on rocky outcrops, 3km NW of Kozluk, on road to Gumusorgu, Siirt Province. latitude: 38 deg. 01 min. N. longitude: 41 deg. 27 min. E. elevation: 1000m. remarks: Occasional, in disturbed soil. Wild. Seed.
- PI 560767 donor id: TU86-34-05. origin: Turkey. collected: July 16, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-34-05. locality: Open oak scrub forest on steep S slope facing scree slope above Pesan River, 2.6km N of Tekeli, on road to Semdinli, Hakkari Province. latitude: 37 deg. 15 min. N. longitude: 44 deg. 39 min. E. elevation: 1430m. remarks: In scree along roadside, not on slope. Weedy. Sperling Herbarium Voucher no. 6881. Wild. Seed.

- PI 560768 donor id: TU86-39-01. origin: Turkey. collected: July 18, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-39-01. locality: Open oak scrub forest region, W facing slope, loose rocky soil, Uzumci village, 29.6km S of Hakkari on Hakkari-Cukurca road, then 0.6km N on road to Baslik, Hakkari Province. latitude: 37 deg. 30 min. N. longitude: 43 deg. 36 min. E. elevation: 1170m. remarks: Common. Many spikes black. Wild. Seed.
- PI 560769 donor id: TU86-40-02. origin: Turkey. collected: July 18, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-40-02. locality: Ungrazed cemetery on knoll with large Pistacia trees and rock outcrops, 0.4km S of Baslik (29.6km S of Hakkari on road to Cukurca, then 5.8km N), Hakkari Province. latitude: 37 deg. 32 min. N. longitude: 43 deg. 36 min. E. elevation: 1460m. remarks: Occasional. Wild. Seed.
- PI 560770 donor id: TU86-43-02-2. origin: Turkey. collected: July 19, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-43-02. locality: Grazed E facing slope above Zap River, with scattered Ziziphus/Pistacia trees, 10km S of junction to Yuksekova on Hakkari-Van road, Hakkari Province. latitude: 37 deg. 42 min. N. longitude: 43 deg. 58 min. E. elevation: 1450m. remarks: Common. Originally collected in same sample as A. cylindrica (TU86-43-02-1). received as: A. cylindrica. Wild. Seed.
- PI 560771 to 560775. Aegilops umbellulata Zhuk. POACEAE

PI 560771 donor id: TU86-04-01. origin: Turkey. collected: July 03, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-04-01. locality: Bare grazed slope along road, 6km W of Cukurca city center, on road to Hakkari, Hakkari Province. latitude: 37 deg. 16 min. N. longitude: 43 deg. 45 min. E. elevation: 950m. remarks: Common. A. speltoides also present here. Wild. Seed.

- PI 560772 donor id: TU86-05-01. origin: Turkey. collected: July 03, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-05-01. locality: East facing grazed slope of rocky soil, at Koprulu military base, 20km N of Cukurca on road to Hakkari, Hakkari Province. latitude: 37 deg. 19 min. N. longitude: 43 deg. 30 min. E. elevation: 960m. Wild. Seed.
- PI 560773 donor id: TU86-11-02. origin: Turkey. collected: July 04, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-11-02. locality: Quercus/Pistacia forest of steep, rocky slopes, at Zap River crossing in village of Cemenli, 24.5km S of Hakkari on road to Cukurca, Hakkari Province. latitude: 37 deg. 29 min. N. longitude: 43 deg. 39 min. E. elevation: 1150m. remarks: Open grazed areas and semi-shade in loose rubble. Wild. Seed.
- PI 560774 donor id: TU86-13-03. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-13-03. locality: Region of open oak forest (some juniper), some fields and grazed slopes, 4.7km E of road junction to Sirvan on Siirt-Pervari road, S side of road, Siirt Province. latitude: 38 deg. 02 min. N. longitude: 42 deg. 05 min. E. elevation: 950m. remarks: On grazed slopes, uncommon at this site. Wild. Seed.
- PI 560775 donor id: TU86-27-05-1. origin: Turkey. collected: July 11, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-27-05-1. locality: Grazed open oak woods on rocky outcrops, 3km NW of Kozluk, on road to Gumusorgu, Siirt Province. latitude: 38 deg. 01 min. N. longitude: 41 deg. 27 min. E. elevation: 1000m. remarks: Common, in disturbed soil. Originally collected in same sample as A. geniculata (TU86-27-05-2). Wild. Seed.
- PI 560776. Avena fatua L. POACEAE Wild oat

#### PI 560776-continued

donor id: TU86-01-02. origin: Turkey. collected: June 29, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-01-02. locality: Loose rocky soil and abandoned agricultural terraces, steep S facing slope, Akdamar Island in Lake Van, Van Province. latitude: 38 deg. 21 min. N. longitude: 43 deg. 02 min. E. elevation: 1730m. Wild. Seed.

PI 560777. Avena sterilis L. POACEAE Animated oat

Donated by: Ankara University, Ankara, Turkey; and Sperling, C.R., Agricultural Research Service -- USDA, National Germplasm Services Lab., Rm. 329, Bldg. 001, BARC-West, Beltsville, Maryland 20705-2350, United States. remarks: A USDA sponsored collection in cooperation with Oregon State University and IBPGR. Received October 15, 1989.

donor id: TU86-20-01. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-20-01. locality: Ungrazed cemetery with large Quercus and Pistacia, hard limestone outcrops, 0.4km E of Uzumluk (Paris) village center, on Siirt-Eruh road, Siirt Province. latitude: 37 deg. 46 min. N. longitude: 42 deg. 06 min. E. elevation: 920m. remarks: Nearly all spikelets shed. Wild. Seed.

PI 560778 to 560781. Hordeum vulgare L. subsp. vulgare POACEAE Barley

Donated by: Ankara University, Ankara, Turkey; and Sperling, C.R., Agricultural Research Service -- USDA, National Germplasm Services Lab., Rm. 329, Bldg. 001, BARC-West, Beltsville, Maryland 20705-2350, United States. remarks: A USDA sponsored collection in cooperation with Oregon State University and IBPGR. Received October 15, 1989.

PI 560778 donor id: TU86-16-01. origin: Turkey. local name: Ce. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-16-01. locality: Area of some scattered oak scrub and shallow agricultural valleys, reddish soils, Ekinduzu village, 22.5km W of Pervari on the Pervari-Siirt road, Siirt Province. latitude: 37 deg. 56 min. E. longitude: 43 deg. 21 min. E. elevation: 1450m. remarks: Cultivated 2-row barley being harvested now. Threshes easily. Spikes white. Cultivated. Seed.

## PI 560778 to 560781-continued

- PI 560779 donor id: TU86-26-01. origin: Turkey. collected: July 11, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-26-01. locality: Siirt wheat market, reported to have come from Bismil village, Siirt Province. remarks: Bulk sample. Cultivated. Seed.
- PI 560780 donor id: TU86-29-03. origin: Turkey. collected: July 11, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-29-03. locality: Region of scrub oak forest, 4.4km S of Sason on road to Gumusorgu (0.2km N of Tekevler village), Siirt Province. latitude: 38 deg. 19 min. N. longitude: 41 deg. 23 min. E. elevation: 1000m. remarks: Cultivated 2-row barley field. Wild. Seed.
- PI 560781 donor id: TU86-36-03. origin: Turkey. collected: July 17, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-36-03. locality: Region of Quercus/Pistacia scrub forest, Bembo village, 13.8km W of Yuksekova-Semdinli road, Hakkari Province. latitude: 37 deg. 23 min. N. longitude: 44 deg. 27 min. E. elevation: 1440m. remarks: Collected from farmer's storage in village. Wild. Seed.
- PI 560782 to 560786. Secale cereale L. subsp. cereale POACEAE Rye

Donated by: Ankara University, Ankara, Turkey; and Sperling, C.R., Agricultural Research Service -- USDA, National Germplasm Services Lab., Rm. 329, Bldg. 001, BARC-West, Beltsville, Maryland 20705-2350, United States. remarks: A USDA sponsored collection in cooperation with Oregon State University and IBPGR. Received October 15, 1989.

PI 560782 donor id: TU86-22-02. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-22-02. locality: Region of open oak woods, cultivated wheat field among oak trees, 14km E of Eruh on Eruh-Sirnak road, Siirt Province. latitude: 37 deg. 42 min. N. longitude: 42 deg. 17 min. E. elevation: 1330m. remarks: Glumes white. Contaminant in wheat field (TU86-22-01). Cultivated. Seed.

- PI 560783 donor id: TU86-33-03-1. origin: Turkey. collected: July 16, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-33-03. locality: Irrigated wheat field above Pesan River in area of dense oak scrub forest, Yesiloz village area, 7.4km S of Semdinli on road to Tekeli, Hakkari Province. latitude: 37 deg. 17 min. N. longitude: 44 deg. 37 min. E. elevation: 1380m. remarks: Contaminant along with Hordeum bulbosum in a winter wheat field (TU86-33-01).Glumes white. Originally collected in same sample as TU86-33-03-2. Cultivated. Seed.
- PI 560784 donor id: TU86-33-03-2. origin: Turkey. collected: July 16, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-33-03. locality: Irrigated wheat field above Pesan River in area of dense oak scrub forest, Yesiloz village area, 7.4km S of Semdinli on road to Tekeli, Hakkari Province. latitude: 37 deg. 17 min. N. longitude: 44 deg. 37 min. E. elevation: 1380m. remarks: Contaminant along with Hordeum bulbosum in a winter wheat field (TU86-33-01). Glumes tan. Originally collected in same sample as TU86-33-03-1. Cultivated. Seed.
- PI 560785 donor id: TU86-38-02-1. origin: Turkey. collected: July 17, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-38-02. locality: Region of oak scrub forest, cultivated winter wheat field, 2.3km W of Yuksekova-Semdinli road on road to Bembo village, Hakkari Province. latitude: 37 deg. 22 min. N. longitude: 44 deg. 30 min. E. elevation: 1540m. remarks: Cultivated rye growing as a comtaminant (20%) in winter wheat field. Glumes white. Sown in October/harvested now. Both spring and winter wheat grown here. Originally collected in same sample as TU86-38-02-2. Cultivated. Seed.
- PI 560786 donor id: TU86-38-02-2. origin: Turkey. collected: July 17, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-38-02. locality: Region of oak scrub forest, cultivated winter wheat field, 2.3km W of Yuksekova-Semdinli road on road to Bembo village, Hakkari Province. latitude: 37 deg. 22 min. N. longitude: 44 deg. 30 min. E. elevation: 1540m. remarks: Cultivated rye growing as a comtaminant (20%) in winter wheat field. Glumes tan. Sown in October/harvested now. Both spring and winter wheat grown here. Originally collected in same sample as TU86-38-02-1. Cultivated. Seed.

- PI 560787 donor id: TU86-03-01-1. origin: Turkey. collected: July 03, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-03-01. locality: Cultivated, irrigated field. City center of Cukurca, Hakkari Province. latitude: 37 deg. 15 min. N. longitude: 43 deg. 47 min. E. elevation: 1260m. remarks: Seed red. Awns and glumes white, nonpubescent. Originally collected in same sample as TU86-03-01-2. Cultivated. Seed.
- PI 560788 donor id: TU86-03-01-2. origin: Turkey. collected: July 03, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-03-01. locality: Cultivated, irrigated field. City center of Cukurca, Hakkari Province. latitude: 37 deg. 15 min. N. longitude: 43 deg. 47 min. E. elevation: 1260m. remarks: Seed red. Awns and glumes tan, nonpubescent. Originally collected in same sample as TU86-03-01-1. Cultivated. Seed.
- PI 560789 donor id: TU86-06-01-1. origin: Turkey. collected: July 03, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-06-01. locality: Irrigated wheat field, stony soil, along Zap River, 33.5km N of Cukurca, on road to Hakkari, Hakkari Province. latitude: 37 deg. 23 min. N. longitude: 43 deg. 31 min. E. elevation: 990m. remarks: Harvested, collected from bundles in threshing pile. Seed red, Awns tan. Glumes brown, pubescent. Originally collected in same sample as TU86-06-01-2 and TU86-06-01-3. Cultivated. Seed.
- PI 560790 donor id: TU86-06-01-2. origin: Turkey. collected: July 03, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-06-01. locality: Irrigated wheat field, stony soil, along Zap River, 33.5km N of Cukurca, on road to Hakkari, Hakkari Province. latitude: 37 deg. 23 min. N. longitude: 43 deg. 31 min. E. elevation: 990m. remarks: Harvested, collected from bundles in threshing pile. Seed red. Awns white. Glumes white, glabrous. Originally collected in same sample as TU86-06-01-1 and TU86-06-01-3. Cultivated. Seed.

- PI 560791 donor id: TU86-06-01-3. origin: Turkey. collected: July 03, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-06-01. locality: Irrigated wheat field, stony soil, along Zap River, 33.5km N of Cukurca, on road to Hakkari, Hakkari Province. latitude: 37 deg. 23 min. N. longitude: 43 deg. 31 min. E. elevation: 990m. remarks: Harvested, collected from bundles in threshing pile. Seed red. Awnlets white. Glumes white, glabrous. Originally collected in same sample as TU86-06-01-1 and TU86-06-01-2. Cultivated. Seed.
- PI 560792 donor id: TU86-07-01-1. origin: Turkey. collected: July 03, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-07-01. locality: Irrigated wheat field along Zap River, 40km N of Cukurca on road to Hakkari, Hakkari Province. latitude: 37 deg. 27 min. N. longitude: 43 deg. 31 min. E. elevation: 1030m. remarks: Collected from only field in immediate area, being harvested now. Seed red. Awns and glumes white, nonpubescent. Spike density 7. Originally collected in same sample with TU86-07-01-2. TU86-07-01-3 and TU86-07-01-4. Aegilops cylindrica present at field margin. Cultivated. Seed.
- PI 560793 donor id: TU86-07-01-2. origin: Turkey. collected: July 03, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-07-01. locality: Irrigated wheat field along Zap River, 40km N of Cukurca on road to Hakkari, Hakkari Province. latitude: 37 deg. 27 min. N. longitude: 43 deg. 31 min. E. elevation: 1030m. remarks: Collected from only field in immediate area, being harvested now. Seed red. Awns and glumes white, nonpubescent. Originally collected in same sample with TU86-07-01-1, TU86-07-01-3 and TU86-07-01-4. Aegilops cylindrica present at field margin. Cultivated. Seed.
- PI 560794 donor id: TU86-07-01-3. origin: Turkey. collected: July 03, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-07-01. locality: Irrigated wheat field along Zap River, 40km N of Cukurca on road to Hakkari, Hakkari Province. latitude: 37 deg. 27 min. N. longitude: 43 deg. 31 min. E. elevation: 1030m. remarks: Collected from only field in immediate area, being harvested now. Seed red. Awns and glumes brown, nonpubescent. Originally collected in same sample with TU86-07-01-1, TU86-07-01-2 and TU86-07-01-4. Aegilops cylindrica present at field margin. Cultivated. Seed.

- PI 560795 donor id: TU86-07-01-4. origin: Turkey. collected: July 03, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-07-01. locality: Irrigated wheat field along Zap River, 40km N of Cukurca on road to Hakkari, Hakkari Province. latitude: 37 deg. 27 min. N. longitude: 43 deg. 31 min. E. elevation: 1030m. remarks: Collected from only field in immediate area, being harvested now. Seed white. Awns and glumes brown, nonpubescent. Originally collected in same sample with TU86-07-01-1, TU86-07-01-2 and TU86-07-01-3. Aegilops cylindrica present at field margin. Cultivated. Seed.
- PI 560796 donor id: TU86-12-01-1. origin: Turkey. collected: July 05, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-12-01. locality: Cultivated wheat field and field margin, 4.4km S of road junction to Yuksekova on Hakkari-Van road, Hakkari Province. latitude: 37 deg. 43 min. N. longitude: 44 deg. 01 min. E. elevation: 1490m. remarks: Seed white. Awnlets white. Glumes white, glabrous. Originally collected with same sample as TU86-12-01-2, TU86-12-01-3 and TU86-12-01-4. Cultivated. Seed.
- PI 560797 donor id: TU86-12-01-2. origin: Turkey. collected: July 05, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-12-01. locality: Cultivated wheat field and field margin, 4.4km S of road junction to Yuksekova on Hakkari-Van road, Hakkari Province. latitude: 37 deg. 43 min. N. longitude: 44 deg. 01 min. E. elevation: 1490m. remarks: Seed red. Awns white. Glumes brown, pubescent. Originally collected with same sample as TU86-12-01-1, TU86-12-01-3 and TU86-12-01-4. Cultivated. Seed.
- PI 560798 donor id: TU86-12-01-3. origin: Turkey. collected: July 05, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-12-01. locality: Cultivated wheat field and field margin, 4.4km S of road junction to Yuksekova on Hakkari-Van road, Hakkari Province. latitude: 37 deg. 43 min. N. longitude: 44 deg. 01 min. E. elevation: 1490m. remarks: Seed red. Awns white. Glumes white, glabrous. Originally collected in same sample with TU86-12-01-1, TU86-12-01-2 and TU86-12-01-4. Cultivated. Seed.

- PI 560799 donor id: TU86-12-01-4. origin: Turkey. collected: July 05, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit, A.A. Atchley. collector id: TU86-12-01. locality: Cultivated wheat field and field margin, 4.4km S of road junction to Yuksekova on Hakkari-Van road, Hakkari Province. latitude: 37 deg. 43 min. N. longitude: 44 deg. 01 min. E. elevation: 1490m. remarks: Seed white. Awns white. Glumes white, glabrous. Originally collected in same sample with TU86-12-01-1, TU86-12-01-2 and TU86-12-01-3. Cultivated. Seed.
- PI 560800 donor id: TU86-13-07. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-13-07. locality: Cultivated durum wheat field, region of open oak forest (some juniper), some fields and grazed slopes, 4.7km E of road junction to Sirvan on Siirt-Pervari road, S side of road. Siirt Province. latitude: 38 deg. 02 min. N. longitude: 042 deg. 05 min. E. elevation: 950m. remarks: Growing mixed with TU86-13-06 and 13-08. Seed red, awned, awns tan. Glumes tan and non-pubescent. Spike density 7. Originally collected in same sample as Triticum durum (TU86-13-07-1 and TU86-13-07-2). Cultivated. Seed.
- Onor id: TU86-13-08-1. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-13-08. locality: Cultivated durum wheat field, region of open oak forest (some juniper), some fields and grazed slopes, 4.7km E of road junction to Sirvan on Siirt-Pervari road, S side of road. Siirt Province. latitude: 38 deg. 02 min. N. longitude: 42 deg. 05 min. E. elevation: 950m. remarks: Growing in same field with TU86-13-06 and TU86-13-07. Seed red. Awns tan. Glumes brown, glabrous. Mixed in field of durum wheat. Originally collected in same sample as TU86-13-08-2, TU86-13-08-3, TU86-13-08-4 and TU86-13-08-5. Cultivated. Seed.
- PI 560802 donor id: TU86-13-08-2. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-13-08. locality: Cultivated durum wheat field, region of open oak forest (some juniper), some fields and grazed slopes, 4.7km E of road junction to Sirvan on Siirt-Pervari road, S side of road. Siirt Province. latitude: 38 deg. 02 min. N. longitude: 42 deg. 05 min. E. elevation: 950m. remarks: Growing in same field with TU86-13-06 and TU86-13-07. Seed red. Awns tan. Glumes brown, glabrous. Mixed in field of durum wheat. Originally collected in same sample as TU86-13-08-1. TU86-13-03-3, TU86-13-08-4 and TU86-13-08.5. Cultivated. Seed.

- PI 560803 donor id: TU86-13-08-3. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-13-08. locality: Cultivated durum wheat field, region of open oak forest (some juniper), some fields and grazed slopes, 4.7km E of road junction to Sirvan on Siirt-Pervari road, S side of road. Siirt Province. latitude: 38 deg. 02 min. N. longitude: 42 deg. 05 min. E. elevation: 950m. remarks: Growing in same field with TU86-13-06 and TU86-13-07. Seed white. Awns tan. Glumes brown, glabrous. Mixed in field of durum wheat. Orginally collected in same sample as TU86-13-08-1. TU86-13-08-2, TU86-13-08-4 and TU86-13-08-5. Cultivated. Seed.
- PI 560804 donor id: TU86-13-08-4. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-13-08. locality: Cultivated durum wheat field, region of open oak forest (some juniper), some fields and grazed slopes, 4.7km E of road junction to Sirvan on Siirt-Pervari road, S side of road, Siirt Province. latitude: 38 deg. 02 min. N. longitude: 42 deg. 05 min. E. elevation: 950m. remarks: Growing in same field with TU86-13-06 and TU86-13-07. Seed red. Awns tan. Glumes white, glabrous. Mixed in field of durum wheat. Originally collected in same sample as TU86-13-08-1. TU86-13-08-2, TU86-13-08-3 and TU86-13-08-5. Cultivated. Seed.
- PI 560805 donor id: TU86-13-08-5. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-13-08. locality: Cultivated durum wheat field, region of open oak forest (some juniper), some fields and grazed slopes, 4.7km E of road junction to Sirvan on Siirt-Pervari road, S side of road, Siirt Province. latitude: 38 deg. 02 min. N. longitude: 42 deg. 05 min. E. elevation: 950m. remarks: Growing in same field with TU86-13-06 and TU86-13-07. Seed red. Awns white. Glumes white, glabrous. Mixed in field of durum wheat. Originally collected in same sample as TU86-13-08-1. TU86-13-08-2, TU86-13-08-3 and TU86-13-08-4. Cultivated. Seed.

- PI 560806 donor id: TU86-14-02. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-14-02. locality: Region of open oak forest and fields, 8.1km E of road junction to Sirvan on Siirt-Pervari road, N side of road, Siirt Province. latitude: 38 deg. 01 min. N. longitude: 42 deg. 07 min. E. elevation: 1030m. remarks: Growing in same field with TU86-14-03. Seed red. Awns brown. Glumes brown, nonpubescent. Spike density 6. Originally collected in same sample as T. durum (TU86-14-02-1 and TU86-14-02-2). Cultivated. Seed.
- PI 560807 donor id: TU86-14-03. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-14-03. locality: Region of open oak forest and fields, 8.lkm E of road junction to Sirvan on Siirt-Pervari road, N side of road, Siirt Province. latitude: 38 deg. 01 min. N. longitude: 42 deg. 07 min. E. elevation: 1030m. remarks: Growing in same field as TU86-14-02. Seed red. Awns and glumes brown, nonpubescent. Spike density 6. Originally collected in same sample as T. durum (TU86-14-03-1, TU86-14-03-2, and TU86-14-03-3). Cultivated. Seed.
- PI 560808 donor id: TU86-14-04-1. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-14-04. locality: Region of open oak forest and fields, 8.1km E of road junction to Sirvan on Siirt-Pervari road, N side of road, Siirt Province. latitude: 38 deg. 01 min. N. longitude: 42 deg. 07 min. E. elevation: 1030m. remarks: Seed red. Awns white. Glumes white, glabrous. Originally collected in same sample with TU86-14-04-2, TU86-14-04-3, TU86-14-04-4, TU86-14-04-5 and TU86-14-04-6. Cultivated. Seed.
- PI 560809 donor id: TU86-14-04-2. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-14-04. locality: Region of open oak forest and fields, 8.1km E of road junction to Sirvan on Siirt-Pervari road, N side of road, Siirt Province. latitude: 38 deg. 01 min. N. longitude: 42 deg. 07 min. E. elevation: 1030m. remarks: Seed red. Awns white. Glumes white, glabrous. Originally collected in same sample with TU86-14-04-1, TU86-14-04-3, TU86-14-04-4, TU86-14-04-5 and TU86-14-04-6. Cultivated. Seed.

- PI 560810 donor id: TU86-14-04-3. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-14-04. locality: Region of open oak forest and fields, 8.lkm E of road junction to Sirvan on Siirt-Pervari road, N side of road, Siirt Province. latitude: 38 deg. 01 min. N. longitude: 42 deg. 07 min. E. elevation: 1030m. remarks: Seed red. Awns tan. Glumes brown and glabrous. Originally collected in same sample with TU86-08-04-1, TU86-14-08-2, TU86-14-08-4, TU86-14-08-5 and TU86-14-08-6. Cultivated. Seed.
- PI 560811 donor id: TU86-14-04-4. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-14-04. locality: Region of open oak forest and fields, 8.lkm E of road junction to Sirvan on Siirt-Pervari road, N side of road, Siirt Province. latitude: 38 deg. 01 min. N. longitude: 42 deg. 07 min. E. elevation: 1030m. remarks: Seed red. Awns white. Glumes tan, pubescent. Originally collected in same sample with TU86-14-04-1, TU86-14-04-2, TU86-14-04-3, TU86-14-04-5 and TU86-14-04-6. Cultivated. Seed.
- PI 560812 donor id: TU86-14-04-5. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-14-04. locality: Region of open oak forest and fields, 8.lkm E of road junction to Sirvan on Siirt-Pervari road, N side of road, Siirt Province. latitude: 38 deg. 01 min. N. longitude: 42 deg. 07 min. E. elevation: 1030m. remarks: Seed red. Awns tan. Glumes brown, pubescent. Originally collected in same sample with TU86-14-04-1, TU86-14-04-2, TU86-14-04-3, TU86-14-04-4 and TU86-14-04-6. Cultivated. Seed.
- PI 560813 donor id: TU86-14-04-6. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-14-04. locality: Region of open oak forest and fields, 8.lkm E of road junction to Sirvan on Siirt-Pervari road, N side of road, Siirt Province. latitude: 38 deg. 01 min. N. longitude: 42 deg. 07 min. E. elevation: 1030m. remarks: Seed red. Awns white. Glumes white, glabrous. Originally collected in same sample with TU86-14-04-1, TU86-14-04-2, TU86-14-04-3, TU86-14-04-4 and TU86-14-04-5. Cultivated. Seed.

- PI 560814 donor id: TU86-15-04. origin: Turkey. local name:
   Istanbul. collected: July 09, 1986. collector: C.R.
   Sperling, D. Eser, H.H. Gecit. collector id: TU86-15-04.
   locality: Region of open oak forest and fields with
   outcrops of hard limestone, 5.0km E of Umurlu village on
   Siirt-Pervari road, Siirt Province. latitude: 37 deg. 56
   min. N. longitude: 42 deg. 16 min. E. elevation:
   1020m. remarks: Cultivated field being harvested. Seed
   white. Awns black. Glumes white, pubescent. Spike
   moderately lax. Cultivated. Seed.
- PI 560815 donor id: TU86-16-04. origin: Turkey. local name:
  Siare. collected: July 09, 1986. collector: C.R.
  Sperling, D. Eser, H.H. Gecit. collector id: TU86-16-04.
  locality: Area of scattered oak scrub and shallow
  agricultural valleys, soils reddish, Ekinduzu village,
  22.5km W of Pervari on Pervari-Siirt road, Siirt
  Province. latitude: 37 deg. 56 min. N. longitude: 43
  deg. 21 min. E. elevation: 1450m. remarks: Collected
  from farmers' storage. Planted in spring. Reported to
  make a superior bread. Seed red. Cultivated. Seed.
- PI 560816 donor id: TU86-16-05. origin: Turkey. local name: Rutu. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-16-05. locality: Area of scattered oak scrub and shallow agricultural valleys, soils reddish, Ekinduzu village, 22.5km W of Pervari on Pervari-Siirt road, Siirt Province. latitude: 37 deg. 56 min. N. longitude: 43 deg. 21 min. E. elevation: 1450m. remarks: Collected from farmers' storage. Reported to be the most drought resistant of seven wheat varieties grown here. Seed white. Cultivated. Seed.
- PI 560817 donor id: TU86-16-06-1. origin: Turkey. local name:
  Kundik. collected: July 09, 1986. collector: C.R.
  Sperling, D. Eser, H.H. Gecit. collector id: TU86-16-06.
  locality: Area of scattered oak scrub and shallow
  agricultural valleys, soils reddish, Ekinduzu village,
  22.5km W of Pervari on Pervari-Siirt road, Siirt
  Province. latitude: 37 deg. 56 min. N. longitude: 43
  deg. 21 min. E. elevation: 1450m. remarks: Collected
  from farmers' storage. Seed red. Originally collected in
  same sample as TU86-16-06-2. Cultivated. Seed.

- PI 560818 donor id: TU86-16-06-2. origin: Turkey. local name:
  Kundik. collected: July 09, 1986. collector: C.R.
  Sperling, D. Eser, H.H. Gecit. collector id: TU86-16-06.
  locality: Area of scattered oak scrub and shallow
  agricultural valleys, soils reddish, Ekinduzu village,
  22.5km W of Pervari on Pervari-Siirt road, Siirt
  Province. latitude: 37 deg. 56 min. N. longitude: 43
  deg. 21 min. E. elevation: 1450m. remarks: Collected
  from farmers' storage. Seed white. Originally collected
  in same sample as TU86-16-06-1. Cultivated. Seed.
- PI 560819 donor id: TU86-22-01-1. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-22-01. locality: Cultivated wheat field among oak trees, region of open oak woods, 14km E of Eruh on Eruh-Sirnak road, Siirt Province. latitude: 37 deg. 42 min. N. longitude: 42 deg. 17 min. E. elevation: 1330m. remarks: Seed red. Awns white. Glumes white, glabrous. Sample similar to "Tir" wheat found near Lake Van. Rye (TU86-22-02) is a contaminant in field. Originally collected in same sample with TU86-22-01-2, TU86-22-01-3, TU86-22-01-4 and TU86-22-01-5. Cultivated. Seed.
- PI 560820 donor id: TU86-22-01-2. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-22-01. locality: Cultivated wheat field among oak trees, region of open oak woods, 14km E of Eruh on Eruh-Sirnak road, Siirt Province. latitude: 37 deg. 42 min. N. longitude: 42 deg. 17 min. E. elevation: 1330m. remarks: Seed white. Awns white. Glumes white, glabrous. Sample similar to "Tir" wheat found near Lake Van. Rye (TU86-22-02) is a contaminant in field. Originally collected in same sample with TU86-22-01-1, TU86-22-01-3, TU86-22-01-4 and TU86-22-01-5. Cultivated. Seed.
- PI 560821 donor id: TU86-22-01-3. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-22-01. locality: Cultivated wheat field among oak trees, region of open oak woods, 14km E of Eruh on Eruh-Sirnak road, Siirt Province. latitude: 37 deg. 42 min. N. longitude: 42 deg. 17 min. E. elevation: 1330m. remarks: Seed white. Awns gray. Glumes gray, pubescent. Sample similar to "Tir" wheat found near Lake Van. Rye (TU86-22-02) is a contaminant in field. Originally collected in same sample with TU86-22-01-1, TU86-22-01-2, TU86-22-01-4 and TU86-22-01-5. Cultivated. Seed.

- PI 560822 donor id: TU86-22-01-4. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-22-01. locality: Cultivated wheat field among oak trees, region of open oak woods, 14km E of Eruh on Eruh-Sirnak road, Siirt Province. latitude: 37 deg. 42 min. N. longitude: 42 deg. 17 min. E. elevation: 1330m. remarks: Seed white. Awns gray. Glumes gray, pubescent. Sample similar to "Tir" wheat found near Lake Van. Rye (TU86-22-02) is a contaminant in field. Originally collected in same sample with TU86-22-01-1, TU86-22-01-2, TU86-22-01-3 and TU86-22-01-5. Cultivated. Seed.
- PI 560823 donor id: TU86-22-01-5. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-22-01. locality: Cultivated wheat field among oak trees, region of open oak woods, 14km E of Eruh on Eruh-Sirnak road, Siirt Province. latitude: 37 deg. 42 min. N. longitude: 42 deg. 17 min. E. elevation: 1330m. remarks: Seed white. Awns white. Glumes brown, glabrous. Sample similar to "Tir" wheat found near Lake Van. Rye (TU86-22-02) is a contaminant in field. Originally collected in same sample with TU86-22-01-1, TU86-22-01-2, TU86-22-01-3 and TU86-22-01-4. Cultivated. Seed.
- PI 560824 donor id: TU86-24-01-1. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-24-01. locality: 1 km E of Eruh on Eruh-Sirnak road, Siirt Province. latitude: 37 deg. 45 min. N. longitude: 42 deg. 12 min. E. elevation: 1070m. remarks: Cultivated wheat field. Growing with T. durum (TU86-24-02). Seed red. Awns white. Glumes white, nonpubescent. Originally collected in same sample as TU86-24-01-2 -- the two types comprising 40% of wheat in this field. Cultivated. Seed.
- PI 560825 donor id: TU86-24-01-2. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-24-01. locality: 1 km E of Eruh on Eruh-Sirnak road, Siirt Province. latitude: 37 deg. 45 min. N. longitude: 42 deg. 12 min. E. elevation: 1070m. remarks: Cultivated wheat field. Growing with T. durum (TU86-24-02). Seed red, awned. Glumes brown, nonpubescent. Originally collected in same sample as TU86-24-01-1 -- the two types comprising 40% of wheat in this field. Cultivated. Seed.

- PI 560826 donor id: TU86-29-02-1. origin: Turkey. collected: July 11, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-29-02. locality: Region of oak scrub forest, 4.4km S of Sason on road to Gumusorgu (0.2km N of Tekevler village), Siirt Province. latitude: 38 deg. 19 min. N. longitude: 41 deg. 23 min. E. elevation: 1000m. remarks: Cultivated field on stony slope. Growing mixed with T. durum (TU86-29-01). Seed red. Awns white. Glumes white, glabrous. Originally collected in same sample as TU86-29-02-2 -- the two types together comprising 35% of wheat in this field. Cultivated. Seed.
- PI 560827 donor id: TU86-29-02-2. origin: Turkey. collected: July 11, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-29-02. locality: Region of oak scrub forest, 4.4km S of Sason on road to Gumusorgu (0.2km N of Tekevler village), Siirt Province. latitude: 38 deg. 19 min. N. longitude: 41 deg. 23 min. E. elevation: 1000m. remarks: Cultivated field on stony slope. Growing mixed with T. durum (TU86-29-01). Seed red. Awns tan. Glumes brown, glabrous. Originally collected in same sample as TU86-29-02-1 -- the two types together comprising 35% of wheat in this field. Cultivated. Seed.
- PI 560828 donor id: TU86-32-01-1. origin: Turkey. local name: Kislik. collected: July 16, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-32-01. locality: Along Pesan River in area of dense oak scrub forest, 4.6km S of Semdinli on road to Tekeli, Hakkari latitude: 37 deg. 17 min. N. longitude: 44 Province. deq. 36 min. E. elevation: 1320m. remarks: Cultivated field, irrigated. Hand broadcast in November, harvest now. This variety was grown here by the farmer's father. Spikes white with a few red spikes (TU86-32-02) mixed in field. Aegilops cylindrica a weed around field margin. Winter and spring wheat are the only two wheat varieties grown here. This farmer says winter wheat is best for bread, spring wheat best for bulghur. Seed red. Awns white. Glumes white, nonpubescent. Originally collected in same sample as TU86-32-01-2. Cultivated. Seed.

- PI 560829 donor id: TU86-32-01-2. origin: Turkey. local name:
  Kislik. collected: July 16, 1986. collector: C.R.
  Sperling, D. Eser, H.H. Gecit. collector id: TU86-32-01.
  locality: Along Pesan River area of dense oak scrub
  forest, 4.6km S of Semdinli on road to Tekli, Hakkari
  Province. latitude: 37 deg. 17 min. N. longitude: 44
  deg. 36 min. E. elevation: 1320m. remarks: Cultivated
  field, irrigated. Hand broadcast in November, harvest
  now. This variety was grown here by the farmer's father.
  Spikes white with a few red spikes (TU86-32-02) mixed in
  field. Aegilops cylindria a weed around field margin.
  Winter and spring wheat are the only two wheat varieties
  grown here. This farmer says winter wheat is best for
  bread, spring wheat best for bulghur. Seed white. Awns
  white. Glumes white, nonpubescent. Originally collected
  in same sample as TU86-032-01-1. Cultivated. Seed.
- PI 560830 donor id: TU86-32-02. origin: Turkey. collected: July 16, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-32-02. locality: Along Pesan River area of dense scrub oak forest, 4.6km S of Semdinli on road to Tekli, Hakkari Province. latitude: 37 deg. 17 min. N. longitude: 44 deg. 36 min. E. elevation: 1320m. remarks: Cultivated field, irrigated. Hand broadcast in November, harvest now. Spikes red, a rare mixture (2%) in a field of "Kislik" wheat (TU86-32-01). Aegilops cylindrica a weed around field margins. Seed red. Awns tan. Glumes brown, glabrous. Cultivated. Seed.
- PI 560831 donor id: TU86-33-01. origin: Turkey. collected: July 16, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-33-01. locality: Irrigated wheat field above Pesan River, area of dense oak scrub forest, Yesiloz village, 7.4km S of Semdinli on road to Tekeli, Hakkari Province. latitude: 37 deg. 17 min. N. longitude: 44 deg. 37 min. E. elevation: 1380m. remarks: Cultivated rye (TU86-33-03) and Hordeum bulbosum are contaminants in this winter wheat field. Spikes red. Seed red. Awns tan. Glumes brown, glabrous. Cultivated. Seed.

- PI 560832 donor id: TU86-33-02. origin: Turkey. collected: July 16, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-33-02. locality: Irrigated wheat field above Pesan River, area of dense oak scrub forest, Yesiloz village, 7.4km S of Semdinli, on road to Tekeli, Hakkari Province. latitude: 37 deg. 17 min. N. longitude: 44 deg. 37 min. E. elevation: 1380m. remarks: A rare contaminant in this winter wheat field (TU86-33-01). Rye (TU86-33-03) and Hordeum bulbosum are also contaminants. Spikes white. Seed red. Awns white. Glumes white, glabrous. Cultivated. Seed.
- PI 560833 donor id: TU86-35-01. origin: Turkey. collected: July 17, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-35-01. locality: Soguksu village, 6.2km E of Durak, Hakkari Province. latitude: 37 deg. 25 min. N. longitude: 44 deg. 36 min. E. elevation: 1800m. remarks: Collected from farmer's storage. Only spring wheat grown in this village. No local names for wheat known here. Seed red. Cultivated. Seed.
- PI 560834 donor id: TU86-36-04. origin: Turkey. collected: July 17, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-36-04. locality: Region of Quercus/Pistacia scrub forest, Bembo village, 13.8km W of Yuksekova-Semdinli road, Hakkari Province. latitude: 37 deg. 23 min. N. longitude: 44 deg. 27 min. E. elevation: 1440m. remarks: Collected from farmer's storage in village. Seed red. Cultivated. Seed.
- PI 560835 donor id: TU86-38-01-1. origin: Turkey. local name:
  Poize. collected: July 17, 1986. collector: C.R.
  Sperling, D. Eser, H.H. Gecit. collector id: TU86-38-01.
  locality: Cultivated winter wheat field, region of oak
  scrub forest, 2.3km W of Yuksekova-Semdinli road, on road
  to Bembo village, Hakkari Province. latitude: 37 deg. 22
  min. N. longitude: 44 deg. 30 min. E. elevation:
  1540m. remarks: Sown in October, harvested now. Both
  spring and winter wheat grown here. Sown many years seed may be from govt. Cultivated rye is contaminant
  (20%) in field. Spikes red. Seed red. Awns white. Glumes
  white, glabrous. Originally collected in same sample as
  TU86-38-01-2. Cultivated. Seed.

- PI 560836 donor id: TU86-38-01-2. origin: Turkey. local name:
  Poize. collected: July 17, 1986. collector: C.R.
  Sperling, D. Eser, H.H. Gecit. collector id: TU86-38-01.
  locality: Cultivated winter wheat field, region of oak
  scrub forest, 2.3km W of Yuksekova-Semdinli road on road
  to Bembo village, Hakkari Province. latitude: 37 deg. 22
  min. N. longitude: 44 deg. 30 min. E. elevation:
  1540m. remarks: Sown in October, harvested now. Both
  spring and winter wheat grown here. Sown many years seed may be from govt. Cultivated rye is contaminant
  (20%). Spikes red. Seed red. Awns tan. Glumes brown,
  glabrous. Originally collected in sample sample as
  TU86-38-01-1. Cultivated. Seed.
- PI 560837 donor id: TU86-39-08-2. origin: Turkey. collected: July 18, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-39-08. locality: Open oak scrub forest area, Uzumci village, 29.6km S of Hakkari on Hakkari-Cukurca road, then 0.6km N on road to Baslik, Hakkari Province. latitude: 37 deg. 30 min. N. longitude: 43 deg. 36 min. E. elevation: 1170m. remarks: Collected from storage of 88 year-old farmer. Seed red. Originally collected in same sample with TU86-39-08-1. Cultivated. Seed.
- PI 560838 donor id: TU86-41-01-1. origin: Turkey. collected: July 18, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-41-01. locality: 1.7km NW of Baslik (29.6km S of Hakkari on road to Cukurca, then 7.9km N), Hakkari Province. latitude: 37 deg. 33 min. N. longitude: 43 deg. 35 min. E. elevation: 1570m. remarks: Plants nearly mature. Probably a spring sown wheat. Seed white. Awns tan. Glumes brown, glabrous. Originally collected with TU86-41-01-2, TU86-41-01-3, TU86-41-01-4, TU86-41-01-5, and TU86-41-01-6. Cultivated. Seed.
- PI 560839 donor id: TU86-41-01-2. origin: Turkey. collected: July 18, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-41-01. locality: 1.7km NW of Baslik (29.6km S of Hakkari on road to Cukurca, then 7.9km N), Hakkari Province. latitude: 37 deg. 33 min. N. longitude: 43 deg. 35 min. E. elevation: 1570m. remarks: Plants nearly mature. Probably a spring sown wheat. Seed red. Awns tan. Glumes brown, glabrous. Originally collected with TU86-41-01-1, TU86-42-01-3, TU86-41-01-4, TU86-41-01-5, and TU86-41-01-6. Cultivated. Seed.

- PI 560840 donor id: TU86-41-01-3. origin: Turkey. collected: July 18, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-41-01. locality: 1.7km NW of Baslik (29.6km S of Hakkari on road to Cukurca, then 7.9km N), Hakkari Province. latitude: 37 deg. 33 min. N. longitude: 43 deg. 35 min. E. elevation: 1570m. remarks: Plants nearly mature. Probably a spring sown wheat. Seed red. Awns white. Glumes white, glabrous. Originally collected with TU86-41-01-1, TU86-41-01-2, TU86-41-01-4, TU86-41-01-5, and TU86-41-01-6. Cultivated. Seed.
- PI 560841 donor id: TU86-41-01-4. origin: Turkey. collected: July 18, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-41-01. locality: 1.7km NW of Baslik (29.6km S of Hakkari on road to Cukurca, then 7.9km N), Hakkari Province. latitude: 37 deg. 33 min. N. longitude: 43 deg. 35 min. E. elevation: 1570m. remarks: Plants nearly mature. Probably a spring sown wheat. Seed white. Awns tan. Glumes brown, glabrous. Originally collected with TU86-41-01-1, TU86-41-01-2, TU86-41-01-3, TU86-41-01-5, and TU86-41-01-6. Cultivated. Seed.
- PI 560842 donor id: TU86-41-01-5. origin: Turkey. collected: July 18, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-41-01. locality: 1.7km NW of Baslik (29.6km S of Hakkari on road to Cukurca, then 7.9km N), Hakkari Province. latitude: 37 deg. 33 min. N. longitude: 43 deg. 35 min. E. elevation: 1570m. remarks: Plants nearly mature. Probably a spring sown wheat. Seed red. Awns tan. Glumes brown, glabrous. Originally collected with TU86-41-01-1, TU86-41-01-2, TU86-41-01-3, TU86-41-01-4, and TU86-41-01-6. Cultivated. Seed.
- PI 560843 donor id: TU86-41-01-6. origin: Turkey. collected: July 18, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-41-01. locality: 1.7km NW of Baslik (29.6km S of Hakkari on road to Cukurca, then 7.9km N), Hakkari Province. latitude: 37 deg. 33 min. N. longitude: 43 deg. 35 min. E. elevation: 1570m. remarks: Plants nearly mature. Probably a spring sown wheat. Seed red. Awns white. Glumes tan, glabrous. Originally collected with TU86-41-01-1, TU86-41-01-2, TU86-41-01-3, TU86-41-01-4, and TU86-41-01-5. Cultivated. Seed.

- PI 560844 donor id: TU86-42-01-1. origin: Turkey. collected: July 18, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-42-01. locality: Gecitli village, W of Hakkari, Hakkari Province. latitude: 37 deg. 36 min. N. longitude: 43 deg. 34 min. E. elevation: 1860m. remarks: Cultivated wheat field. Most spikes in field white, about 5% red. Seed red. Awns white. Glumes white, non-pubescent. Originally collected in same sample with TU86-42-01-2 and TU86-42-01-3, TU86-42-01-4, TU86-42-01-5, and TU86-42-01-6. Cultivated. Seed.
- PI 560845 donor id: TU86-42-01-3. origin: Turkey. collected: July 18, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-42-01. locality: Gecitli village, W of Hakkari, Hakkari Province. latitude: 37 deg. 36 min. N. longitude: 43 deg. 34 min. E. elevation: 1860m. remarks: Cultivated wheat field. Most spikes in field white, about 5% red. Seed red. Awns white. Glumes white, non-pubescent. Spike density 7. Originally collected in same sample with TU86-42-01-1, TU86-42-01-2, TU86-42-01-4, TU86-42-01-5 and TU86-42-01-6. Cultivated. Seed.
- PI 560846 donor id: TU86-42-01-4. origin: Turkey. collected: July 18, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-42-01. locality: Gecitli village, W of Hakkari, Hakkari Province. latitude: 37 deg. 36 min. N. longitude: 43 deg. 34 min. E. elevation: 1860m. remarks: Cultivated wheat field. Most spikes in field white, about 5% red. Seed red. Awns white. Glumes white, non-pubescent. Originally collected in same sample as TU86-42-01-1, TU86-42-01-2, TU86-42-01-3, TU86-42-01-5, and TU86-42-01-6. Cultivated. Seed.
- PI 560847 donor id: TU86-42-01-5. origin: Turkey. collected: July 18, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-42-01. locality: Gecitli village, W of Hakkari, Hakkari Province. latitude: 37 deg. 36 min. N. longitude: 43 deg. 34 min. E. elevation: 1860m. remarks: Cultivated wheat field. Most spikes in field white, about 5% red. Seed white. Awns brown. Glumes brown, non-pubescent. Originally collected in same sample as TU86-42-01-1, TU86-42-01-2, TU86-42-01-3, TU86-42-01-4, and TU86-42-01-6. Cultivated. Seed.

- PI 560848 donor id: TU86-42-01-6. origin: Turkey. collected: July 18, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-42-01. locality: Gecitli village, W of Hakkari, Hakkari Province. latitude: 37 deg. 36 min. N. longitude: 43 deg. 34 min. E. elevation: 1860m. remarks: Cultivated wheat field. Most spikes in field white, about 5% red. Seed red. Awns brown. Glumes brown, non-pubescent. Originally collected in same sample as TU86-42-01-1, TU86-42-01-2, TU86-42-01-3, TU86-42-01-4, and TU86-42-01-5. Cultivated. Seed.
- PI 560849 donor id: TU86-42-04-1. origin: Turkey. collected: July 18, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-42-04. locality: Gecitli village, W of Hakkari, Hakkari Province. latitude: 37 deg. 36 min. N. longitude: 43 deg. 34 min. E. elevation: 1860m. remarks: Collected from farmer's storage. Winter wheat. No local names used here, only winter or spring wheat. Seed red. Originally collected in a bulk sample along with TU86-42-04-2. Cultivated. Seed.
- PI 560850 donor id: TU86-42-04-2. origin: Turkey. collected: July 18, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-42-04. locality: Gecitli village, W of Hakkari, Hakkari Province. latitude: 37 deg. 36 min. N. longitude: 43 deg. 34 min. E. elevation: 1860m. remarks: Collected from farmer's storage. Winter wheat. No local names used here, only winter or spring wheat. Seed white. Originally collected in a bulk sample along with TU86-42-04-1. Annual. Cultivated. Seed.
- PI 560851 donor id: TU86-42-05-1. origin: Turkey. collected: July 18, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-42-05. locality: Gecitli village, W of Hakkari, Hakkari Province. latitude: 37 deg. 36 min. N. longitude: 43 deg. 34 min. E. elevation: 1860m. remarks: Collected from farmer's storage. Winter wheat. No local names used here, only winter and spring wheat. Seed white. Originally collected in a bulk sample along with TU86-42-05-2. Cultivated. Seed.
- PI 560852 donor id: TU86-42-05-2. origin: Turkey. collected: July 18, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-42-05. locality: Gecitli village, W of Hakkari, Hakkari Province. latitude: 37 deg. 36 min. N. longitude: 43 deg. 34 min. E. elevation: 1860m. remarks: Collected from farmer's storage. No local names used here, only winter or spring wheat. Seed red. Originally collected in a bulk sample along with TU86-42-05-1. Cultivated. Seed.

- PI 560853 donor id: TU86-44-01. origin: Turkey. collected: July 19, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-44-01. locality: Cultivated wheat field, soil red, being harvested now, 4.6km N of junction to Yuksekova on Hakkari-Van road, Hakkari Province. latitude: 37 deg. 44 min. N. longitude: 44 deg. 05 min. E. elevation: 1720m. remarks: Growing in field with TU86-44-02 and TU86-44-03. Spike compact, awned. Seed red. Glumes brown, glabrous. Spike density 7. No local names used for wheat by this farmer. Cultivated. Seed.
- PI 560854 donor id: TU86-44-02-1. origin: Turkey. collected: July 19, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-44-02. locality: Cultivated wheat field, soil red, being harvested now, 4.6km N of junction to Yuksekova on Hakkari-Van road, Hakkari Province. latitude: 37 deg. 44 min. N. longitude: 44 deg. 05 min. E. elevation: 1720m. remarks: Growing in field with TU86-44-01 and TU86-44-03. Spike long with white awns. Seed white. Glumes white, non-pubescent. Common smut (Tilletia ssp.) present. Originally collected in same sample as TU86-44-02-2, TU86-44-02-3 and TU86-44-02-4. Cultivated. Seed.
- PI 560855 donor id: TU86-44-02-2. origin: Turkey. collected: July 19, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-44-02. locality: Cultivated wheat field, soil red, being harvested now, 4.6km N of junction to Yuksekova on Hakkari-Van road, Hakkari Province. latitude: 37 deg. 44 min. N. longitude: 44 deg. 05 min. E. elevation: 1720m. remarks: Growing in field with TU86-44-01 and TU86-44-03. Spike long with brown awns. Seed red. Glumes brown, non-pubescent. No local names for wheat used by this farmer. Originally collected in same sample as TU86-44-02-1, TU86-44-02-3 and TU86-44-02-4. Cultivated. Seed.
- PI 560856 donor id: TU86-44-02-3. origin: Turkey. collected: July 19, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-44-02. locality: Cultivated wheat field, soil red, being harvested now, 4.6km N of junction to Yuksekova on Hakkari-Van road, Hakkari Province. latitude: 37 deg. 44 min. N. longitude: 44 deg. 05 min. E. elevation: 1720m. remarks: Growing in field with TU86-44-01 and TU86-44-03. Spike long with tan awnlets. Seed white. Glumes tan, pubescent. No local names for wheat used by this farmer. Common smut (Tilletia ssp.) present. Originally collected with TU86-44-02-1, TU86-44-02-2 and TU86-44-02-4. Cultivated. Seed.

- PI 560857 donor id: TU86-44-02-4. origin: Turkey. collected: July 19, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-44-02. locality: Cultivated wheat field, soil red, being harvested now, 4.6km N of junction to Yuksekova on Hakkari-Van road, Hakkari Province. latitude: 37 deg. 44 min. N. longitude: 44 deg. 05 min. E. elevation: 1720m. remarks: Growing in field with TU86-44-01 and TU86-44-03. Spike long with white awns. Seed red. Glumes white, non-pubescent. No local names for wheat used by this farmer. Common smut (Tilletia ssp.) present. Originally collected with TU86-44-02-1, TU86-44-02-2 and TU86-44-02-3. Cultivated. Seed.
- PI 560858 donor id: TU86-44-03. origin: Turkey. collected: July 19, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-44-03. locality: Cultivated wheat field, soil red, being harvested now, 4.6km N of junction to Yuksekova on Hakkari-Van road, Hakkari Province. latitude: 37 deg. 44 min. N. longitude: 44 deg. 05 min. E. elevation: 1720m. remarks: Growing in field with TU86-44-01 and TU86-44-02. Spike red, with white awnlets. Seed white. Glumes tan, pubescent. No local names for wheat used by this farmer. Cultivated. Seed.
- PI 560859 donor id: TU86-46-01-1. origin: Turkey. collected: July 22, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-46-01. locality: Dry steppe region, gentle W slope, not stoney, 17km N of Karasu River on Van-Ercis road, Van Province. latitude: 38 deg. 47 min. N. longitude: 43 deg. 22 min. E. elevation: 1810m. remarks: Cultivated field of "Tir" wheat, sown in widely spaced rows (ca 0.4m), rye a contaminant. Seed white. Awns tan. Glumes tan, pubescent. Originally collected in same sample with TU86-46-01-2, TU86-46-01-3, TU86-46-01-4, and TU86-46-01-5. Cultivated. Seed.
- PI 560860 donor id: TU86-46-01-2. origin: Turkey. collected: July 22, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-46-01. locality: Dry steppe region, gentle W slope, not stoney, 17km N of Karasu River on Van-Ercis road, Van Province. latitude: 38 deg. 47 min. N. longitude: 43 deg. 22 min. E. elevation: 1810m. remarks: Cultivated field of "Tir" wheat, sown in widely spaced rows (ca 0.4m), rye a contaminant. Seed white. Awnlets tan. Glumes tan, pubescent. Originally collected in same sample with TU86-46-01-1, TU86-46-01-3, TU86-46-01-4, and TU86-46-01-5. Cultivated. Seed.

### PI 560787 to 560863-continued

- PI 560861 donor id: TU86-46-01-3. origin: Turkey. collected: July 22, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-46-01. locality: Dry steppe region, gentle W slope, not stoney, 17km N of Karasu River on Van-Ercis road, Van Province. latitude: 38 deg. 47 min. N. longitude: 43 deg. 22 min. E. elevation: 1810m. remarks: Cultivated field of "Tir" wheat, sown in widely spaced rows (ca 0.4m), rye a contaminant. Seed white. Awnlets white. Glumes white, pubescent. Originally collected in same sample as TU86-46-01-1, TU86-46-01-2, TU86-46-01-4, and TU86-46-01-5. Cultivated. Seed.
- PI 560862 donor id: TU86-46-01-4. origin: Turkey. collected: July 22, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-46-01. locality: Dry steppe region, gentle W slope, not stoney, 17km N of Karasu River on Van-Ercis road, Van Province. latitude: 38 deg. 47 min. N. longitude: 43 deg. 22 min. E. elevation: 1810m. remarks: Cultivated field of "Tir" wheat, sown in widely spaced rows (ca 0.4m), rye a contaminant. Seed red. Awns white. Glumes white, pubescent. Originally collected in same sample as TU86-46-01-1, TU86-46-01-2, TU86-46-01-3, and TU86-46-01-5. Cultivated. Seed.
- PI 560863 donor id: TU86-46-01-5. origin: Turkey. collected: July 22, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-46-01. locality: Dry steppe region, gentle W slope, not stoney, 17km N of Karasu River on Van-Ercis road, Van Province. latitude: 38 deg. 47 min. N. longitude: 43 deg. 22 min. E. elevation: 1810m. remarks: Cultivated field of "Tir" wheat, sown in widely spaced rows (ca 0.4m), rye a contaminant. Seed white. Awns gray. Glumes gray, pubescent. Originally collected in same sample as TU86-46-01-1, TU86-46-01-2, TU86-46-01-3, and TU86-46-01-4. Cultivated. Seed.
- PI 560864 to 560870. Triticum boeoticum Boiss. POACEAE Wild einkorn

- PI 560864 donor id: TU86-14-01. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-14-01. locality: Region of open oak forest and fields, 8.1km E of road junction to Sirvan on Siirt-Pervari road, N side of road, Siirt Province. latitude: 38 deg. 01 min. N. longitude: 42 deg. 07 min. E. elevation: 1030m. remarks: Plants 0.5-1.0m tall, growing on roadbank in semi-shade. Common at this site, but only on roadside. received as: T. monococcum subsp. boeoticum. Wild. Seed.
- PI 560865 donor id: TU86-15-03. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-15-03. locality: Region of open oak forest and fields with outcrops of hard limestone, 5.0km E of Umurlu village on Siirt-Pervari road, Siirt Province. latitude: 37 deg. 56 min. N. longitude: 42 deg. 16 min. E. elevation: 1020m. remarks: Plants 0.4-1.0m tall, growing in rocky and disturbed areas near wheat field, becoming weedy. Spikes black or white. Growing with T. dicoccoides (TU86-15-02). received as: T. monococcum subsp. boeoticum. Wild. Seed.
- PI 560866 donor id: TU86-19-02. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-19-02. locality: Ungrazed cemetery with large uncut oaks, hard limestone outcrops, 6km W of Uzumluk village (Paris) on Siirt-Eruh road, Siirt Province. latitude: 37 deg. 47 min. N. lengitude: 42 deg. 03 min. E. elevation: 760m. remarks: Plants 0.4-1.0m tall, growing in semi-shade. Spikes black or white, spikelets one-seeded. received as: T. monococcum subsp. boeoticum. Wild. Seed.
- PI 560867 donor id: TU86-21-02. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-21-02. locality: Coppiced Quercus/Pistacia trees among small grain fields on S slope, hard limestone outcrops present, soils red, 8.2km E of Eruh on Eruh-Sirnak road, Siirt Province. latitude: 37 deg. 44 min. N. longitude: 42 deg. 15 min. E. elevation: 1140m. remarks: Spikes black or white. Weedy, at edges of fields. received as: T. monococcum subsp. boeoticum. Wild. Seed.

- PI 560868 donor id: TU86-23-02. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-23-02. locality: Heavily grazed, hard limestone outcrops with scattered Acer, Quercus and Crataegus, 23.5km E of Eruh, on Eruh-Sirnak road (5km E of the highest pass on the road), Siirt Province. latitude: 37 deg. 38 min. N. longitude: 42 deg. 21 min. E. elevation: 1410m. remarks: Spikes black or white, growing around rocks. received as: T. monococcum subsp. boeoticum. Wild. Seed.
- PI 560869 donor id: TU86-27-02. origin: Turkey. collected: July 11, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-27-02. locality: Grazed, open oak woods on rocky outcrops, 3km NW of Kozluk on road to Gumusorgu, Siirt Province. latitude: 38 deg. 01 min. N. longitude: 41 deg. 27 min. E. elevation: 1000m. remarks: Only found in rocky ground along roadside, not in adjacent oak woods. received as: T. monococcum subsp. boeoticum. Wild. Seed.
- PI 560870 donor id: TU86-30-02. origin: Turkey. collected: July 11, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-30-02. locality: Grazed, open Quercus/Ziziphus vegetation on hard limestone, 6.8km N of Kozluk on road to Gumusorgu, Siirt Province. latitude: 38 deg. 13 min. N. longitude: 41 deg. 26 min. E. elevation: 1050m. remarks: Plants 0.4-0.8m tall, growing among rocks in semi-shade. Wild. Seed.
- PI 560871. Triticum boeoticum Boiss. subsp. boeoticum POACEAE

donor id: TU86-13-01. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-13-01. locality: Region of open oak forest (some juniper), some fields and grazed slopes, 4.7km E of road junction to Sirvan on Siirt-Pervari road, S side of road, Siirt Province. latitude: 38 deg. 02 min. N. longitude: 42 deg. 05 min. E. elevation: 950m. remarks: Uncommon at this site, in semi-shade of oaks. received as: T. monococcum subsp. boeoticum. Wild. Seed.

PI 560872 to 560877. Triticum dicoccoides (Korn. ex Aschers. & Graebn.)
Aarons. POACEAE Wild emmer

- PI 560872 donor id: TU86-15-02. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-15-02. locality: Region of open oak forests and fields with outcrops of hard limestone, 5.0km E of Umurlu village on Siirt-Pervari road, Siirt Province. latitude: 37 deg. 56 min. N. longitude: 42 deg. 16 min. E. elevation: 1020m. remarks: Plants 0.3-0.8m tall. Growing in rocky areas in full sun and semi-shade. All spikes white. Growing with T. boeoticum (TU86-15-03). Wild. Seed.
- PI 560873 donor id: TU86-19-03. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-19-03. locality: Ungrazed cemetery with large uncut oaks, hard limestone outcrops, 6km W of Uzumluk village (Paris), on Siirt-Eruh road, Siirt Province. latitude: 37 deg. 47 min. N. longitude: 42 deg. 03 min. E. elevation: 760m. remarks: Plants 0.3-0.8m tall. Growing in semi-shade. Spikes reddish-white. Wild. Seed.
- PI 560874 donor id: TU86-21-01. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-21-01. locality: Coppiced Quercus/Pistacia trees among small grain fields on S slope, hard limestone outcrops present, soils red, 8.2km E of Eruh on Eruh-Sirnak road, Siirt Province. latitude: 37 deg. 44 min. N. longitude: 42 deg. 15 min. E. elevation: 1140m. remarks: Spikes reddish. In semi-shade. Wild. Seed.
- PI 560875

  donor id: TU86-23-01. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-23-01. locality: Heavily grazed, hard limestone outcrops with scattered Acer, Quercus and Crataegus, 23.5km E of Eruh on Eruh-Sirnak road (5km E of highest pass on road), Siirt Province. latitude: 37 deg. 38 min. N. longitude: 42 deg. 21 min. E. elevation: 1410m. remarks: Only around rocks. Spikes reddish. Wild. Seed.

# PI 560872 to 560877-continued

- PI 560876 donor id: TU86-27-01. origin: Turkey. collected: July 11, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-27-01. locality: Grazed, open oak woods on rocky outcrops, 3km NW of Kozluk on road to Gumusorgu, Siirt Province. latitude: 38 deg. 01 min. N. longitude: 41 deg. 27 min. E. elevation: 1000m. remarks: Only found in rocky ground along roadside, not in adjacent oak woods. Wild. Seed.
- PI 560877 donor id: TU86-30-01. origin: Turkey. collected: July 11, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-30-01. locality: Grazed, open Quercus/Ziziphus vegetation on hard limestone outcrops, 6.8km N of Kozluk on road to Gumusorgu, Siirt Province. latitude: 38 deg. 13 min. N. longitude: 41 deg. 26 min. E. elevation: 1050m. remarks: Plants 0.3-0.7m tall, growing among rocks in semi-shade. Wild. Seed.
- PI 560878 to 560895. Triticum durum Desf. POACEAE Durum wheat

- PI 560878 donor id: TU86-13-06-1. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-13-06. locality: Cultivated durum wheat field, region of open oak forest (some juniper), some fields and grazed slopes, 4.7km E of road junction to Sirvan on Siirt-Pervari road, S side of road, Siirt Province. latitude: 38 deg. 02 min. N. longitude: 42 deg. 05 min. E. elevation: 950m. remarks: Growing mixed with TU86-13-07 and TU86-13-08. Seed amber. Awns black. Glumes white, glabrous. Cultivated. Seed.
- PI 560879

  donor id: TU86-13-06-2. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-13-06. locality: Cultivated durum wheat field, region of open oak forest (some juniper), some fields and grazed slopes, 4.7km E of road junction to Sirvan on Siirt-Pervari road, S side of road, Siirt Province. latitude: 38 deg. 02 min. N. longitude: 42 deg. 05 min. E. elevation: 950m. remarks: Growing mixed with TU86-13-07 and TU86-13-08. Seed amber. Awns white. Glumes white, glabrous. Cultivated. Seed.

- PI 560880 donor id: TU86-13-06-3. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-13-06. locality: Cultivated durum wheat field, region of open oak forest (some juniper), some fields and grazed slopes, 4.7km E of road junction to Sirvan on Siirt-Pervari road, S side of road, Siirt Province. latitude: 38 deg. 02 min. N. longitude: 42 deg. 05 min. E. elevation: 950m. remarks: Growing mixed with TU86-13-07 and TU86-13-08. Seed amber. Awns tan. Glumes tan, glabrous. Cultivated. Seed.
- PI 560881 donor id: TU86-13-07-1. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-13-07. locality: Cultivated durum wheat field, region of open oak forest (some juniper), some fields and grazed slopes, 4.7km E of road junction to Sirvan on Siirt-Pervari road, S side of road, Siirt Province. latitude: 38 deg. 02 min. N. longitude: 42 deg. 05 min. E. elevation: 950m. remarks: Growing mixed with TU86-13-06 and TU86-13-08. Seed amber. Awns white. Glumes white, nonpubescent. Spike density 7. Originally collected in same sample as TU86-13-07-2. Cultivated. Seed.
- PI 560882 donor id: TU86-13-07-2. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-13-07. locality: Cultivated durum wheat field, region of open oak forest (some juniper), some fields and grazed slopes, 4.7km E of road junction to Sirvan on Siirt-Pervari road, S side of road, Siirt Province. latitude: 38 deg. 02 min. N. longitude: 42 deg. 05 min. E. elevation: 950m. remarks: Growing mixed with TU86-13-06 and TU86-13-08. Seed amber. Awns tan. Glumes tan, nonpubescent. Spike density 7. Originally collected in sample sample as TU86-13-07-1. Cultivated. Seed.
- PI 560883 donor id: TU86-14-02-1. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-14-02. locality: Region of open oak forest and fields, 8.1km E of road junction to Sirvan on Siirt-Pervari road, N side of road, Siirt Province. latitude: 38 deg. 01 min. N. longitude: 42 deg. 07 min. E. elevation: 1030m. remarks: Growing in same field with TU86-14-03. Seed amber. Awns tan. Glumes tan, nonpubescent. Spike density 7. Originally collected in same sample as TU86-14-02-2 and T. aestivum (TU86-14-02). Cultivated. Seed.

- PI 560884 donor id: TU86-14-02-2. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-14-02. locality: Region of open oak forest and fields, 8.1km E of road junction to Sirvan on Siirt-Pervari road, N side of road, Siirt Province. latitude: 38 deg. 01 min. N. longitude: 42 deg. 07 min. E. elevation: 1030m. remarks: Growing in same field as TU86-14-03. Seed amber. Awns and glumes white, nonpubescent. Spike density 7. Originally collected in same sample as TU86-14-02-1 and T. aestivum (TU86-14-02). Cultivated. Seed.
- PI 560885 donor id: TU86-14-03-2. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-14-03. locality: Region of open oak forest and fields, 8.1km E of road junction to Sirvan on Siirt-Pervari road, N side of road, Siirt Province. latitude: 38 deg. 01 min. N. longitude: 42 deg. 07 min. E. elevation: 1030m. remarks: Growing in same field with TU86-14-02. Seed large, amber. Awns black. Glumes white with slight black markings. Spike density 6. Originally collected in same sample with TU86-14-03-1, TU86-14-03-3 and T. aestivum (TU86-14-03). Cultivated. Seed.
- PI 560886 donor id: TU86-14-03-3. origin: Turkey. collected: July 09, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-14-03. locality: Region of open oak forest and fields, 8.1km E of road junction to Sirvan on Siirt-Pervari road, N side of road, Siirt Province. latitude: 38 deg. 01 min. N. longitude: 42 deg. 07 min. E. elevation: 1030m. remarks: Growing in same field as TU86-14-02. Seed amber. Awns tan. Glumes tan, nonpubescent. Spike density 6. Originally collected in same sample with TU86-14-03-1, TU86-24-03-2 and T. aestivum (TU86-14-03). Cultivated. Seed.
- PI 560887

  donor id: TU86-19-01. origin: Turkey. local name:
  Haciali. collected: July 10, 1986. collector: C.R.
  Sperling, D. Eser, H.H. Gecit. collector id: TU86-19-01.
  locality: Region of open oak forest and oak/Ziziphus
  scrub, 6km W of Uzumluk village (Paris) on Siirt-Eruh
  road, Siirt Province. latitude: 37 deg. 47 min. N.
  longitude: 42 deg. 03 min. E. elevation: 760m.
  remarks: Cultivated wheat field. Seed amber. Awns white.
  Glumes tan, glabrous. Sown in October, harvested July.
  Fertilizer used. Cultivated. Seed.

- PI 560888 donor id: TU86-24-02-1. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-24-02. locality: 1 km E of Eruh on Eruh-Sirnak road, Siirt Province. latitude: 37 deg. 45 min. N. longitude: 42 deg. 12 min. E. elevation: 1070m. remarks: Cultivated wheat field growing with T. aestivum (TU86-24-01). Seed amber. Awns white. Glumes white, glabrous. Originally collected in same sample as TU86-24-02-2, TU86-24-02-3 and TU86-24-02-4 -- the four types together comprising 60% of wheat in this field. Cultivated. Seed.
- PI 560889 donor id: TU86-24-02-2. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-24-02. locality: 1 km E of Eruh on Eruh-Sirnak road, Siirt Province. latitude: 37 deg. 45 min. N. longitude: 42 deg. 12 min. E. elevation: 1070m. remarks: Growing in cultivated wheat field with T. aestivum (TU86-24-01). Seed amber. Awns white. Glumes white, glabrous. Originally collected in same sample as TU86-24-02-1, TU86-24-02-3 and TU86-24-02-4 -- the four types together comprising 60% of wheat field in this field. Cultivated. Seed.
- PI 560890 donor id: TU86-24-02-4. origin: Turkey. collected: July 10, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-24-02. locality: 1 km E of Eruh on Eruh-Sirnak road, Siirt Province. latitude: 37 deg. 45 min. N. longitude: 42 deg. 12 min. E. elevation: 1070m. remarks: Growing in cultivated wheat field with T. aestivum (TU86-24-01). Seed amber. Awns black. Glumes white, glabrous. Originally collected in same sample as TU86-24-02-1, TU86-24-02-2 and TU86-24-02-3 -- the four types together comprising 60% wheat in this field. Cultivated. Seed.
- PI 560891 donor id: TU86-26-02. origin: Turkey. local name:
  Kundik. collected: July 11, 1986. collector: C.R.
  Sperling, D. Eser, H.H. Gecit. collector id: TU86-26-02.
  locality: Siirt wheat market, Siirt Province. remarks:
  Cultivated wheat reported to have come from Roket
  village. Seed amber. Cultivated. Seed.

- PI 560892 donor id: TU86-28-01-2-1. origin: Turkey. collected:
  July 11, 1986. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU86-28-01. locality: Region of
  oak scrub forest, 20.5km N of Kozluk, Gumusorgu village,
  Siirt Province. latitude: 38 deg. 16 min. N. longitude:
  41 deg. 24 min. E. elevation: 1200m. remarks: Collected
  from threshing pile in village. Seed amber. Awns black.
  Glumes white, nonpubescent. Spike density 5. Originally
  collected in same sample as TU86-28-01-2-2 and T.
  turanicum (TU86-28-01-1). Cultivated. Seed.
- PI 560893 donor id: TU86-28-01-2-2. origin: Turkey. collected:
  July 11, 1986. collector: C.R. Sperling, D. Eser, H.H.
  Gecit. collector id: TU86-28-01. locality: Region of
  oak scrub forest, 20.5km N of Kozluk, Gumusorgu village,
  Siirt Province. latitude: 38 deg. 16 min. N. longitude:
  41 deg. 24 min. E. elevation: 1200m. remarks: Collected
  from threshing pile in village. Seed amber. Awns black.
  Glumes white, nonpubescent. Spike density 6. Originally
  collected in same sample as TU86-28-01-2-1 and T.
  turanicum (TU86-28-01-1). Cultivated. Seed.
- PI 560894 donor id: TU86-29-01. origin: Turkey. collected: July 11, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-29-01. locality: Region of oak scrub forest, 4.4km S of Sason on road to Gumusorgu village (0.2km N of Tekevler village), Siirt Province. latitude: 38 deg. 19 min. N. longitude: 41 deg. 23 min. E. elevation: 1000m. remarks: Cultivated field on stony slope, comprising 65% of wheat in this field, mixed with T. aestivum (TU86-29-02). Seed amber, plump. Awns tan. Glumes tan, nonpubescent. Spike density 7. Cultivated. Seed.
- PI 560895

  donor id: TU86-29-02-3. origin: Turkey. collected: July 11, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-29-02. locality: Region of oak scrub forest, 4.4km S of Sason on road to Gumusorgu village (0.2km N of Tekevler village), Siirt Province. latitude: 38 deg. 19 min. N. longitude: 41 deg. 23 min. E. elevation: 1000m. remarks: Cultivated field on stony slope. Seed white. NOTE: This sample should either be discarded or mixed with TU86-29-01 (T. durum) which was collected from the same field. This sample was mixed in with T. aestivum (TU86-29-02-1 and TU86-29-02-2). Cultivated. Seed.

PI 560896. Triticum turanicum Jakubz. POACEAE Oriental wheat

Donated by: Ankara University, Ankara, Turkey; and Sperling, C.R., Agricultural Research Service -- USDA, National Germplasm Services Lab., Rm. 329, Bldg. 001, BARC-West, Beltsville, Maryland 20705-2350, United States. remarks: A USDA sponsored collection in cooperation with Oregon State University and IBPGR. Received October 15, 1989.

donor id: TU86-28-01-1. origin: Turkey. collected: July 11, 1986. collector: C.R. Sperling, D. Eser, H.H. Gecit. collector id: TU86-28-01. locality: Region of oak scrub forest, 20.5km N of Kozluk, Gumusorgu village, Siirt Province. latitude: 38 deg. 16 min. N. longitude: 41 deg. 24 min. E. elevation: 1200m. remarks: Collected from threshing pile in village. Seed amber. Awns black. Glumes white, pubescent. Seeds very large and long. Originally collected in the same sample as T. durum (TU86-28-01-2-1 and TU86-28-01-2-2). received as: T. durum. Cultivated. Seed.

PI 560897. Capsicum sp. SOLANACEAE Pepper

Donated by: Delgado, R.M., Semillas Solana, Casilla 237, Loja, Ecuador. remarks: Received through George A. White, National Germplasm Resources Laboratory, USDA-ARS, Beltsville, Maryland. Received September 03, 1991.

origin: Ecuador. locality: Conderguana, 45 minute walk from Turrianuma (15km from Vilcabamba). elevation: 1700m. remarks: Fruits small, medium-hot, from single plant. Perennial. Cultivated. Seed.

PI 560898. Trifolium sp. FABACEAE

Donated by: Jensen, K.B., Forage and Range Res., Utah State University, Logan, Utah 84322-6300, United States. Received October 10, 1991.

donor id: DJ-3803. origin: Russian Federation. collected: August 05, 1989. collector: D. Dewey. K. Jensen. collector id: DJ-3803. locality: Field plots of O. & A. Agafonov in Central Siberian Botanical Garden, Academy Town, Novosibirsk, RSFSR. remarks: Stems to 60cm. Leaflets large. Heads large, bristly. Cultivated. Seed.

PI 560899. Vicia cracca L. FABACEAE

Donated by: Jensen, K.B., Forage and Range Res., Utah State University, Logan, Utah 84322-6300, United States. Received October 10, 1991.

donor id: DJ-3788. origin: Russian Federation.
collected: August 05, 1989. collector: D. Dewey. K.
Jensen. collector id: DJ-3788. locality: In shaded
birch-pine woods near hotel in Academy Town, Novosibirsk.
elevation: 200m. remarks: Vine-like stems to over 90cm.
Wild. Seed.

PI 560900. Benincasa hispida (Thunb.) Cogn. CUCURBITACEAE Waxgourd

Donated by: Robinson, R.W., Dept. of Horticultural Sciences, NY State Agr. Exp. Sta., Cornell Univ., Hedrick Hall, Geneva, New York 14456-0462, United States. Received November 15, 1991.

donor id: 9. origin: China. origin institute: Beijing Vegetable Research Centre, Beijing, China. Cultivated. Seed.

PI 560901. Citrullus lanatus (Thunb.) Matsum. var. lanatus CUCURBITACEAE Watermelon

Donated by: Robinson, R.W., Dept. of Horticultural Sciences, NY State Agr. Exp. Sta., Cornell Univ., Hedrick Hall, Geneva, New York 14456-0462, United States. Received November 15, 1991.

donor id: 7. origin: China. origin institute: Beijing Vegetable Research Centre, Beijing, China. cultivar: JING XING NO. 1. remarks: Fl. Fruit medium-sized. Sugar content high. Cultivar. Seed.

PI 560902. Momordica charantia L. CUCURBITACEAE Bitter melon

Donated by: Robinson, R.W., Dept. of Horticultural Sciences, NY State Agr. Exp. Sta., Cornell Univ., Hedrick Hall, Geneva, New York 14456-0462, United States. Received November 15, 1991.

donor id: 8. origin: China. origin institute: Beijing Vegetable Research Centre, Beijing, China. Cultivated. Seed.

PI 560903 to 560906. Solanum melongena L. SOLANACEAE Eggplant

Donated by: Robinson, R.W., Dept. of Horticultural Sciences, NY State Agr. Exp. Sta., Cornell Univ., Hedrick Hall, Geneva, New York 14456-0462, United States. Received November 15, 1991.

#### PI 560903 to 560906-continued

- PI 560903 donor id: 33. origin: China. origin institute:

  Northwest Agricultural University, Yangling, China.

  cultivar: SIX LEAVES. remarks: Six nodes to first
  flower. Cultivar. Seed.
- PI 560904 donor id: 34. origin: China. origin institute:

  Northwest Agricultural University, Yangling, China.

  cultivar: SEVEN LEAVES. remarks: Seven nodes to first flower. Cultivar. Seed.
- PI 560905 donor id: 35. origin: China. origin institute:
  Northwest Agricultural University, Yangling, China.
  cultivar: NINE LEAVES. remarks: Nine nodes to first
  flower. Cultivar. Seed.
- PI 560906 donor id: 36. origin: China. origin institute:
  Northwest Agricultural University, Yangling, China.
  cultivar: GREEN. remarks: Fruits green. Cultivar.
  Seed.
- PI 560907. Vigna unguiculata subsp. sesquipedalis (L.) Verdc. FABACEAE Yard long bean

Donated by: Robinson, R.W., Dept. of Horticultural Sciences, NY State Agr. Exp. Sta., Cornell Univ., Hedrick Hall, Geneva, New York 14456-0462, United States. Received November 15, 1991.

donor id: 23. origin: China. origin institute:
Northwest Agricultural University, Yangling, China.
Cultivated. Seed.

PI 560908. Viburnum lentago L. CAPRIFOLIACEAE

Donated by: Knudson, M., USDA-SCS, Bismarck Plant Materials Center, P.O. Box 1458, Bismarck, North Dakota 58502, United States. remarks: Received thru National Plant Materials Center, USDA-SCS, Bldg. 509, BARC-East, Beltsville, MD 20705. Received March 18, 1992.

donor id: ND-21. origin: United States. source history: Native stands north of Mandan, ND in 1922. collected: November 03, 1954. collector: J. McDermand. other id: 9034900. other id: T-34900. locality: East orchard. USDA, ARS, Northern Great Plains Research Laboratory, Mandan, North Dakota. remarks: Winter hardy, deciduous shrub. May grow 16' in height. Leaves ovate, 3" in length. Leaf tip sharply acuminate. Margin sharply and finely serrate, with dark green upper surface and winged petiole. Flowers white, bloom mid-May. Fruit 1/2" long, bluish-black drupe, ripening in September. Attractive purplish-red fall color. Used in farmstead and field windbreaks; wildlife recreation, and surface mine plantings. Adapted to wide range of soils. Cultivated. Seed.

- PI 560909 to 560911. Glycine max (L.) Merr. FABACEAE Soybean
  - Donated by: Palmer, R., G301 Agronomy, Iowa State University, Ames, Iowa 50011, United States. Received March 19, 1992.
  - PI 560909 origin: United States. developed: R. Groose. origin institute: Iowa State University, Ames, Iowa 50011 United States. pedigree: Mutant in PI 540553. other id: T 323. remarks: Maturity Group II. Indeterminate. Flowers purple. Pubescence grey, normal density. Pod brown. Seed coat yellow. Hilum brown. Malate dehydrogenase null. Plant color yellow-green. Vigor reduced. Found in 1986 by R. Groose. Genetic Material. Seed.
  - PI 560910 origin: United States. developed: R. Groose. origin institute: Iowa State University, Ames, Iowa 50011 United States. pedigree: Mutant in PI 540553. other id: T 324. remarks: Maturity Group II. Indeterminate. Flowers purple. Pubescence grey, normal density. Pod brown. Seed coat yellow. Hilum brown. Malate dehydrogenase null. Plant color yellow-green. Vigor reduced. Found in 1986 by R. Groose. Genetic Material. Seed.
  - PI 560911 origin: United States. developed: R. Groose. origin institute: Iowa State University, Ames, Iowa 50011 United States. pedigree: Mutant in PI 540553. other id: T 325. remarks: Maturity Group II. Indeterminate. Flowers purple. Pubescence grey, normal density. Pod brown. Seed coat yellow. Hilum brown. Malate dehydrogenase null. Plant color yellow-green. Vigor reduced. Found in 1986 by R. Groose. Genetic Material. Seed.

- PI 560912 to 560916. Hordeum vulgare L. subsp. vulgare POACEAE Barley
  - Donated by: Ullrich, S.E., Washington Agr. Exp. Sta., Pullman, Washington 99164, United States. Received March 24, 1992.
  - PI 560912 donor id: WA 7190-86. origin: United States. developed: S.E. Ullrich. origin institute: Washington Agr. Exp. Sta., Pullman, Washington 99164 United States. pedigree: WA 10698-76 / WA 8517-74. remarks: Two-row, spring malting barley. Breeding Material. Seed.
  - PI 560913 donor id: WA 10489-86. origin: United States.
    developed: S.E. Ullrich. origin institute: Washington
    Agr. Exp. Sta., Pullman, Washington 99164 United
    States. pedigree: WA 7511-79 / Hazen. remarks: Six-row,
    spring malting barley. Breeding Material. Seed.
  - PI 560914 donor id: WA 11163-86. origin: United States.
    developed: S.E. Ullrich. origin institute: Washington
    Agr. Exp. Sta., Pullman, Washington 99164 United
    States. pedigree: WA 8334-81 / Cougbar. remarks:
    Six-row, spring malting barley. Breeding Material.
    Seed.
  - PI 560915 donor id: WA 11224-86. origin: United States.
    developed: S.E. Ullrich. origin institute: Washington
    Agr. Exp. Sta., Pullman, Washington 99164 United
    States. pedigree: WA 8334-81 / Hazen. remarks: Six-row,
    spring malting barley. Breeding Material. Seed.
  - PI 560916 donor id: WA 9593-87. origin: United States. developed: S.E. Ullrich. origin institute: Washington Agr. Exp. Sta., Pullman, Washington 99164 United States. pedigree: WA 11094-81 / Cougbar. remarks: Six-row, spring feed barley. Breeding Material. Seed.
- PI 560917 to 560922. Hordeum vulgare L. subsp. vulgare POACEAE Barley

  Donated by: Albrechtsen, R.S., Utah Agr. Exp. Sta., Logan, Utah
  84322, United States. Received March 24, 1992.
  - PI 560917 donor id: UT 1181. origin: United States. developed:
    R.S. Albrechtsen. origin institute: Utah Agr. Exp. Sta.,
    Logan, Utah 84322 United States. pedigree: UT
    73B1-1009 / UT 82B374-218-A. remarks: Six-row, spring
    feed barley. Breeding Material. Seed.
  - PI 560918 donor id: UT 2684. origin: United States. developed:
    R.S. Albrechtsen. origin institute: Utah Agr. Exp. Sta.,
    Logan, Utah 84322 United States. pedigree: UT
    80B250-1423 / UT 82B374-223-A. remarks: Six-row, spring
    feed barley. Breeding Material. Seed.

- PI 560919 donor id: UT 3109. origin: United States. developed:
  R.S. Albrechtsen. origin institute: Utah Agr. Exp. Sta.,
  Logan, Utah 84322 United States. pedigree: UT
  80B250-1423 / UT 82B374-223-A. remarks: Six-row, spring
  feed barley. Breeding Material. Seed.
- PI 560920 donor id: UT 11640. origin: United States. developed:
  R.S. Albrechtsen. origin institute: Utah Agr. Exp. Sta.,
  Logan, Utah 84322 United States. pedigree: WA 641566 /
  Bracken. remarks: Six-row, spring feed barley. Breeding
  Material. Seed.
- PI 560921 donor id: UT 150582. origin: United States. developed:
  R.S. Albrechtsen. origin institute: Utah Agr. Exp. Sta.,
  Logan, Utah 84322 United States. pedigree: UT
  75B65-303 / Kombar. remarks: Six-row, spring feed
  barley. Breeding Material. Seed.
- PI 560922 donor id: UT 502355. origin: United States. developed:
  R.S. Albrechtsen. origin institute: Utah Agr. Exp. Sta.,
  Logan, Utah 84322 United States. pedigree: Steptoe /
  UT 80B250-1553. remarks: Six-row, spring feed barley.
  Breeding Material. Seed.
- PI 560923. Hordeum vulgare L. subsp. vulgare POACEAE Barley

Donated by: Franckowiak, J.D., North Dakota Agr. Exp. Sta., Fargo, North Dakota 58105, United States. Received March 24, 1992.

donor id: ND 11230. origin: United States. developed: J.D. Franckowiak. origin institute: North Dakota Agr. Exp. Sta., Fargo, North Dakota 85105 United States. pedigree: ND 7085 / Bowman sib / / ND 7556. remarks: Two-row, spring malting barley. Breeding Material. Seed.

PI 560924. Hordeum vulgare L. subsp. vulgare POACEAE Barley

Donated by: McProud, W.L., Plant Breeders 1, Inc., Moscow, Idaho 83843, United States. Received March 24, 1992.

origin: United States. developed: W.L. McProud. origin institute: Plant Breeders 1, Inc., Moscow, Idaho 83843 United States. cultivar: PB1-88-6R-401. other id: PVP 9300028. source: Pending. group: PVPO. patent: PVPO. remarks: Six-row, spring feed barley. Cultivar. Seed.

PI 560925. Hordeum vulgare L. subsp. vulgare POACEAE Barley

Donated by: Wesenberg, D.M., Agricultural Research Service -- USDA, P.O. Box 307, Aberdeen, Idaho 83210, United States. Received March 24, 1992.

donor id: 81Ab1702. origin: United States. developed: D.M. Wesenberg. origin institute: Agricultural Research Service -- USDA, P.O. Box 307, Aberdeen, Idaho 83210 United States. pedigree: Selection from bulk of Aberdeen winter barley crosses. remarks: Two-row, winter feed barley. Breeding Material. Seed.

PI 560926. Abelmoschus sp. MALVACEAE

Donated by: Williams, D.E., Agricultural Research Service -- USDA, National Germplasm Resources Lab., Bldg. 003, 4th Floor, Beltsville, Maryland 20705-2350, United States. Received January 14, 1991.

donor id: 1020. origin: Bolivia. local name: cafe brasilero. collected: October 03, 1989. collector: D.E. Williams. collector id: 1020. other id: Grif 954. locality: Chaco across from Carmen Florida, in upland forest, 500m S of river, La Paz Dept. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 250m. remarks: Coarse herb, to 2m. Corolla yellow with dark purple at inside base of petals. Staminal tube and anthers yellow. Stigma dark purple. Wilted corollas turn pink. Fruits green, 10cm long, producing numerous round grey seeds. Roasted seeds used to prepare coffee substitute beverage. Cultivated. Seed.

PI 560927 to 560932. Arachis hypogaea subsp. fastigiata Waldron FABACEAE

- PI 560927 donor id: 1143. origin: Bolivia. local name: mani cascara negra (Spanish), janide bitidebena (Tacana). collected: July 26, 1990. collector: D.E. Williams. collector id: 1143. other id: Grif 955. locality: Small village approx. 5km upriver from Rurrenabaque on riverbank of Rio Beni, Ballivian Province, Beni Dept., Carmen Florida. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 235m. remarks: Plants erect, 40cm tall. Flowers orange. Pegs purple. Stems tinged purple. Fruits 5.5cm long, fairly thick, dark brown, slightly shiny, fairly straight or curved, little or no constriction, with humps, beak. Reticulation evident but not sharp. Containing 4 claret red seeds. Cultivated in loose sand of riverine beaches during low water. Rare. Planted April 1, 1990. Harvested today. received as: A. hypogaea subsp. fastigiata var. fastigiata. Cultivated. Seed.
- PI 560928 donor id: 1144. origin: Bolivia. local name: mani amarillo (Spanish), janide marabi (Tacana). collected: August 11, 1990. collector: D.E. Williams. collector id: 1144. other id: Grif 956. locality: Carmen Florida, Ballivian Province, Beni Dept. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 235m. remarks: Plants erect, 30cm tall. Fruits 4-6cm long, slender, thin shelled, fairly straight or curved, little or no constriction, with humps, beak, keel. Reticulation marked. Containing 4 pale yellow seeds. Pegs green. Stems green. Flowers bi-colored. Cultivated on sandy riverine beaches. Rare. received as: A. hypogaea subsp. fastigiata var. fastigiata. Cultivated. Seed.
- PI 560929 donor id: 1145. origin: Bolivia. local name: mani peruano (Spanish), janide ritchiritchi (Tacana). collected: August 11, 1990. collector: D.E. Williams. collector id: 1145. other id: Grif 957. locality: Carmen Florida, Ballivian Province, Beni Dept. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 235m. remarks: Plants erect, 40cm tall. Fruits 4-4.5cm long, fairly straight, little or no constriction, with humps, keel, slight beak. Stems green. Pegs purple. Flowers orange with purple lines on wings and standard. Reticulation very sharp with longitudinal veins outstanding, containing 3-4 deep purple seeds. Cultivated on sandy riverine beaches. Rare. received as: A. hypogaea subsp. fastigiata var. peruviana. Cultivated. Seed.

- PI 560930 donor id: 1146. origin: Bolivia. local name: mani blanco (Spanish), janide pashane (Tacana). collected: August 11, 1990. collector: D.E. Williams. collector id: 1146. other id: Grif 958. locality: Carmen Florida, Ballivian Province, Beni Dept. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 235m. remarks: Plants erect, large, 50cm tall. Fruits large 5-6cm long, bulky, thick shelled, fairly straight or curved. Little or no constriction. Pronounced humps, beak, some with keel. Reticulation evident but subdued, containing 4 large creamy white seeds which turn pinkish with age. Commonly cultivated on sandy riverine beaches. received as: A. hypogaea subsp. fastigiata var. fastigiata. Cultivated. Seed.
- donor id: 1154. origin: Bolivia. local name: mani (Spanish), dabaj (Moseten). collected: October 24, 1990. collector: D.E. Williams. collector id: 1154. other id: Grif 960. locality: La Paz Dept. latitude: 15 deg. 31 min. S. longitude: 67 deg. 30 min. W. elevation: 400m. remarks: Mix of mostly white and a few red-seeded fruits. Pods 4-5cm long, fairly straight, without constriction. Humps small. Beak slight. Reticulation shallow and rounded, containing 3-4 white (palido) or red seeds. Cultivated by Mosetene Indians in Santa Ana de los Mosetenes, Nor Yungas, La Paz, on slash-and-burn plots in floodplain forest of Rio Alto Beni. Sample provided by Ines Hinojosa. received as: A. hypogaea subsp. fastigiata var. fastigiata. Cultivated. Seed.
- PI 560932 donor id: 1170. origin: Bolivia. local name: mani colorado (Spanish), janide derena (Tacana). collected: November 09, 1990. collector: D.E. Williams. collector id: 1170. other id: Grif 961. locality: Carmen Florida, Ballivian Province, Beni Dept. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 235m. remarks: Fruits 3.5-5.5cm long, fairly straight, little or no constriction, humps and beak. Reticulation shallow and rounded to almost smooth, containing 3-4 red seeds. Cultivated on sandy beaches of Rio Beni. Common. received as: A. hypogaea subsp. fastigiata var. fastigiata. Cultivated. Seed.
- PI 560933. Arachis hypogaea L. subsp. hypogaea FABACEAE

donor id: 1148. origin: Bolivia. local name: mani. collected: September 10, 1990. collector: D.E. Williams. collector id: 1148. other id: Grif 959. locality: Rurrenabaque. latitude: 14 deg. 28 min. S. longitude: 67 deg. 34 min. W. elevation: 227m. remarks: Fruits 3-4cm long, straight, little or no constriction, humps, slight keel and beak. Reticulation deep but not sharp, containing 2-3 reddish-brown seeds. Said to be grown locally. received as: A. hypogaea subsp. hypogaea var. hypogaea. Cultivated. Seed.

# PI 560934 to 560936. Capsicum sp. SOLANACEAE

- PI 560934 donor id: 1153. origin: Argentina. local name: aji
  verde. collected: October 20, 1990. collector: D.E.
  Williams. collector id: 1153. other id: Grif 963.
  locality: Humahuaca market, Jujuy Province. latitude: 23
  deg. 10 min. S. longitude: 065 deg. 15 min. W.
  elevation: 2940m. remarks: Fruits conical, 3-5cm long,
  yellowish green with purple patches appearing when ripe.
  Some fruits turning orange and red. Seeds white, very
  piquant. Cultivated locally. Cultivated. Seed.
- PI 560935 donor id: 1173. origin: Bolivia. local name: aji
  (Spanish), bi-do (Tacana). collected: December 09, 1990.
  collector: D.E. Williams. collector id: 1173. other id:
  Grif 964. locality: Sunday market, Rurrenbaque.
  latitude: 14 deg. 28 min. S. longitude: 67 deg. 34 min.
  W. elevation: 227m. remarks: Fruits elongate, conical,
  5-8cm long, 1-1.5cm diam. Color green, turning yellow,
  orange and glossy red when ripe. Seeds light yellow,
  moderately piquant. Cultivated locally. Common.
  Cultivated. Seed.
- PI 560936 donor id: 1177. origin: Bolivia. local name: aji
  (Spanish), bido (Tacana). collected: December 13, 1990.
  collector: D.E. Williams. collector id: 1177. other id:
  Grif 965. locality: Carmen Florida. latitude: 14 deg.
  30 min. S. longitude: 67 deg. 30 min. W. elevation:
  235m. remarks: Plants semi-perennial, many-branched, to
  lm tall. Flowers light yellow. Fruits usually strawberry
  shaped, 5cm long, 3.5cm diam., sometimes 8-9cm long.
  Fruit color bright red-orange, glossy. Seeds light
  yellow. Not piquant. Commonly cultivated variety, in
  floodplain chaco. Cultivated. Seed.

### PI 560937. Cucurbita ficifolia Bouche CUCURBITACEAE

Donated by: Williams, D.E., Agricultural Research Service -- USDA, National Germplasm Resources Lab, Bldg. 003, 4th Floor, Beltsville, Maryland 20705-2350, United States. Received January 14, 1991.

donor id: 1152. origin: Argentina. local name: cayote. collected: October 20, 1990. collector: D.E. Williams. collector id: 1152. other id: Grif 966. locality: Humahuaca market, Jujuy Province. latitude: 23 deg. 10 min. S. longitude: 065 deg. 15 min. W. elevation: 2940m. remarks: Fruit slightly ovoid, 25cm long, green flecked with narrow discontinuous white stripes. Flesh white. Seeds black. Commonly cultivated locally. Used to prepare candied squash. Cultivated. Seed.

# PI 560938. Cucurbita sp. CUCURBITACEAE

Donated by: Williams, D.E., Agricultural Research Service -- USDA, National Germplasm Resources Lab, Bldg. 003, 4th Floor, Beltsville, Maryland 20705-2350, United States. Received January 14, 1991.

donor id: 1172. origin: Bolivia. local name: joco. collected: December 09, 1990. collector: D.E. Williams. collector id: 1172. other id: Grif 967. locality: Sunday market, Rurrenabaque. latitude: 14 deg. 28 min. S. longitude: 67 deg. 34 min. W. elevation: 227m. remarks: Squash 25cm long, 15cm max. diam., waisted. Color creamy yellow. Ribbed slightly. Flesh thick, firm, dark orange. Seeds light brown. Cultivated locally. Cultivated. Seed.

### PI 560939. Cajanus cajan (L.) Millsp. FABACEAE

Donated by: Williams, D.E., Agricultural Research Service -- USDA, National Germplasm Resources Lab., Bldg. 003, 4th Floor, Beltsville, Maryland 20705-2350, United States. Received February 13, 1991.

donor id: 1036. origin: Bolivia. local name: chicharilla. collector: D.E. Williams. collector id: 1036. other id: Grif 407. locality: Rurrenabaque. latitude: 14 deg. 28 min. S. longitude: 67 deg. 34 min. W. elevation: 227m. remarks: Shrub 3m tall. Standard purple outside and yellow inside. Wings yellow. Keel light green. Fruits indehiscent, persistant, flattened, turning dark brown when dry. Contain 5 round, flattened, tan seeds. Seeds edible as pulse. Cultivated in dooryard garden. Cultivated. Seed.

- PI 560940 donor id: 932. origin: Bolivia. local name: aji.
  collected: August 05, 1989. collector: D.E. Williams.
  collector id: 932. other id: Grif 408. locality:
  Dooryard garden of private residence, Rurrenabaque.
  latitude: 14 deg. 28 min. S. longitude: 67 deg. 34 min.
  W. elevation: 227m. remarks: Shrub perennial, 2m tall.
  Flowers yellowish white, nodding. Fruits small, ovoid,
  lcm long, erect, turing red when ripe. Seeds yellow.
  Fruits eaten by birds. Piquant. Common. Cultivated.
  Seed.
- PI 560941 donor id: 933. origin: Bolivia. local name: aji.
  collected: August 05, 1989. collector: D.E. Williams.
  collector id: 933. other id: Grif 409. locality:
  Dooryard garden of private residence, Rurrenabaque.
  latitude: 14 deg. 28 min. S. longitude: 67 deg. 34 min.
  W. elevation: 227m. remarks: Shrub perennial, 1.5m
  tall. Flowers greenish yellow with dark anthers, nodding.
  Fruits small to 1.5cm long, turning dark red when ripe.
  Shape conical, erect, piquant. Common. Cultivated.
  Seed.
- PI 560942 donor id: 934. origin: Bolivia. local name: aji.
  collected: August 05, 1989. collector: D.E. Williams.
  collector id: 934. other id: Grif 410. locality:
  Dooryard garden of private residence, Rurrenabaque.
  latitude: 14 deg. 28 min. S. longitude: 67 deg. 34 min.
  W. elevation: 227m. remarks: Shrub perennial, 2m tall
  or more if climbing branches find support. Flowers
  greenish-white with purple anthers and style, nodding.
  Fruits large, to 10cm long, pendent. Shape elongated,
  acuminate, somewhat distorted. Skin shiny, turning orange
  then red when ripe. Mildly piquant. Flesh thick and firm.
  Seeds light yellow. Common. Cultivated. Seed.
- PI 560943 donor id: 1048. origin: Bolivia. local name: aji.
  collected: October 20, 1989. collector: D.E. Williams.
  collector id: 1048. other id: Grif 411. locality:
  Rurrenabaque. latitude: 14 deg. 28 min. S. longitude:
  67 deg. 34 min. W. elevation: 227m. remarks: Fruits
  vaguely spheroid with flattened tops, 5cm diam., somewhat
  ribbed, inverted apex. Color deep red. Pedicel insertion
  slightly depressed. Fruit walls firm and thick,
  moderately piquant. Placenta red. Seeds light yellow.
  Purchased from vendor. Cultivated. Seed.

# PI 560944. Capsicum chacoense Hunz. SOLANACEAE

Donated by: Williams, D.E., Agricultural Research Service -- USDA, National Germplasm Resources Lab., Bldg. 003, 4th Floor, Beltsville, Maryland 20705-2350, United States. Received February 13, 1991.

donor id: 1122. origin: Argentina. local name:
putapario. collected: March 28, 1990. collector: D.E.
Williams. collector id: 1122. other id: Grif 412.
locality: Estacion Experimental Manfredi, Cordoba
Province, Rep. of Argentina. latitude: 31 deg. 57 min.
S. longitude: 063 deg. 40 min. W. elevation: 300m.
remarks: Perennial herb, lm tall. Flowers white, without spots on corolla. Pedicels erect, nodding. Fruits erect, ovoid, 1.3cm long, shiny orange-red, very piquant. Seeds numerous, light brown. Growing in weedy area in shade of Melia azedarach trees. Common. Wild. Seed.

# PI 560945 to 560948. Cucurbita sp. CUCURBITACEAE

- PI 560945

  donor id: 1045. origin: Bolivia. local name: zapallo.
  collected: October 15, 1989. collector: D.E. Williams.
  collector id: 1045. other id: Grif 413. locality:
  Sunday market, Rurrenabaque. latitude: 14 deg. 28 min.
  S. longitude: 67 deg. 34 min. W. elevation: 227m.
  remarks: Oblong, cylindrical squash, 40cm long, 15cm
  diam., ribbed. Color olive green speckled with salmon
  orange. Flesh orange. Seeds snow white. Purchased in
  market. Cultivated. Seed.
- PI 560946

  donor id: 1049. origin: Bolivia. local name: joco.
  collected: October 24, 1989. collector: D.E. Williams.
  collector id: 1049. other id: Grif 414. locality:
  Rurrenabaque. latitude: 14 deg. 28 min. S. longitude:
  67 deg. 34 min. W. elevation: 227m. remarks: Fruit
  elongated, pear shaped, 40cm long, 13cm max. diam., very
  slightly ribbed. Color dark green with flesh-colored
  spots and speckles. Flesh stringy, orange. Seeds
  off-white with tan border. Grown locally, purchased in
  store. Cultivated. Seed.

# PI 560945 to 560948-continued

PI 560947 donor id: 1052. origin: Bolivia. local name: joco.
collected: October 29, 1989. collector: D.E. Williams.
collector id: 1052. other id: Grif 415. locality:
Market, Rurrenabaque. latitude: 14 deg. 28 min. S.
longitude: 67 deg. 34 min. W. elevation: 227m. remarks:
Elongate, semi-cylindrical, ribbed squash, 35cm long,
15cm diam. Color predominantly salmon orange with some
green at apex. Peduncle swollen, corky, green. Flesh
orange. Seeds white. Grown locally. Cultivated. Seed.

PI 560948 donor id: 1053. origin: Bolivia. local name: zapallo. collected: October 29, 1989. collector: D.E. Williams. collector id: 1053. other id: Grif 416. locality: Rurrenabaque. latitude: 14 deg. 28 min. S. longitude: 67 deg. 34 min. W. elevation: 227m. remarks: Pumpkin-like squash, slightly ribbed, 15cm long, 22cm diam. Color orange and green dappled. Peduncle woody. Flesh thick, orange. Seeds light brown. Grown locally. Cultivated. Seed.

# PI 560949. Cucurbita moschata (Duchesne) Poiret CUCURBITACEAE

Donated by: Williams, D.E., Agricultural Research Service -- USDA, National Germplasm Resources Lab., Bldg. 003, 4th Floor, Beltsville, Maryland 20705-2350, United States. Received February 13, 1991.

donor id: 1103. origin: Bolivia. collected: January 07, 1990. collector: D.E. Williams. collector id: 1103. other id: Grif 418. locality: Sunday market in port, Rurrenabaque. latitude: 14 deg. 28 min. S. longitude: 67 deg. 34 min. W. elevation: 227m. remarks: Strawberry-shaped squash, 18cm long, 16cm diam., strongly ribbed. Color light salmon and light green flecked with light salmon. Peduncle woody, ribbed, flared at insertion. Flesh firm, thick, bright orange. Seeds light brown, 13mm long. Cultivated. Seed.

# PI 560950 to 560952. Cucurbita sp. CUCURBITACEAE

# PI 560950 to 560952-continued

- PI 560950 donor id: 1104. origin: Bolivia. local name: zapallo. collected: January 07, 1990. collector: D.E. Williams. collector id: 1104. other id: Grif 419. locality: Sunday market in port, Rurrenabaque. latitude: 14 deg. 28 min. S. longitude: 67 deg. 34 min. W. elevation: 227m. remarks: Spheroid squash, 15cm long, 22cm diam., deeply ribbed. Color drab olive. Peduncle insertion depressed, corky, stigma scar corky. Flesh thick, firm, orange. Seeds white, 1.5cm long. Grown locally. Cultivated. Seed.
- PI 560951 donor id: 1105. origin: Bolivia. local name: zapallo. collected: January 07, 1990. collector: D.E. Williams. collector id: 1105. other id: Grif 420. locality: Sunday market in port, Rurrenabaque. latitude: 14 deg. 28 min. S. longitude: 67 deg. 34 min. W. elevation: 227m. remarks: Cylindrical squash, 40cm long, 15cm diam., shallowly ribbed. Color orange and olive drab. Peduncle corky. Flesh thick, firm, dark orange. Seeds white. Grown locally. Cultivated. Seed.
- PI 560952 donor id: 1110. origin: Bolivia. local name: joco.
  collected: February 25, 1990. collector: D.E. Williams.
  collector id: 1110. other id: Grif 421. locality:
  Sunday market, Rurrenabaque. latitude: 14 deg. 28 min.
  S. longitude: 67 deg. 34 min. W. elevation: 227m.
  remarks: Elongate squash, 50cm long, 8cm diam., slightly
  twisted, slightly ribbed. Color light green variegated
  with yellow, turning mostly yellow when ripe. Peduncle
  woody, ribbed, flared at insertion. Flesh thick, firm,
  light orange. Seeds light brown, lcm long. Ovary only in
  distal half of fruit, proximal half solid. Grown locally.
  Cultivated. Seed.
- PI 560953. Cucurbita maxima subsp. andreana (Naudin) Filov CUCURBITACEAE

donor id: 1121. origin: Argentina. local name: zapallito amargo. collected: March 28, 1990. collector: D.E. Williams. collector id: 1121. other id: Grif 417. locality: Estacion Experimental Manfredi, Cordoba Province, Republic of Argentina. latitude: 31 deg. 57 min. S. longitude: 63 deg. 40 min. W. elevation: 300m. remarks: Gourd egg shaped, 8cm long, 6.5cm diam. Color greenish yellow with darker narrow longitudinal stripes. Single fruit brought by an INTA extension agent from soybean field in Lozada, 15km W of Cordoba City, (April 1989), where it is reported to be an abundant weed. Local squash farmers claim this weed causes their cultivars to become bitter. Common. Wild. Seed.

# PI 560954. Ipomoea sp. CONVOLVULACEAE

Donated by: Williams, D.E., Agricultural Research Service -- USDA, National Germplasm Resources Lab., Bldg. 003, 4th Floor, Beltsville, Maryland 20705-2350, United States. Received February 13, 1991.

donor id: 1111. origin: Bolivia. collected: August 02, 1989. collector: D.E. Williams. collector id: 1111. other id: Grif 422. locality: Office building (garden) of "Save the Children" project, Yucumo, Ballivian Province, Beni Dept. latitude: 15 deg. 12 min. S. longitude: 66 deg. 57 min. W. elevation: 250m. remarks: Herbaceous vine climbing over shrubs and fence. Flowers large, showy. Evidently cultivated as ornamental in dooryard garden. Seeds large (1cm long), black. Seed.

PI 560955. Ipomoea carnea ssp. fistulosa (C. Martius ex Choisy) D. Austin CONVOLVULACEAE

Donated by: Williams, D.E., Agricultural Research Service -- USDA, National Germplasm Resources Lab., Bldg. 003, 4th Floor, Beltsville, Maryland 20705-2350, United States. Received February 13, 1991.

donor id: 1119. origin: Bolivia. local name: tararaqui. collected: March 22, 1990. collector: D.E. Williams. collector id: 1119. other id: Grif 423. locality: Cercado Province, Beni Dept., Trinidad. latitude: 14 deg. 48 min. S. longitude: 64 deg. 52 min. W. elevation: 155m. remarks: Shrub to 2.5m tall. Flowers lavender. Anthers dehiscing, white. Fruits spherical, containing 4 fuzzy seeds. Sap milky white. Common. Wild. Seed.

PI 560956. Sicana odorifera (Vell.) Naud. CUCURBITACEAE

Donated by: Williams, D.E., Agricultural Research Service -- USDA, National Germplasm Resources Lab., Bldg. 003, 4th Floor, Beltsville, Maryland 20705-2350, United States. Received February 13, 1991.

donor id: 926. origin: Bolivia. local name: pavi. collected: June 12, 1989. collector: D.E. Williams. collector id: 926. other id: Grif 424. locality: 12km E of center of Santa Cruz on S side of road to Cotoca, Jardin Botanico de Santa Cruz, Andres Ibanez Province, Santa Cruz Dept. latitude: 17 deg. 46 min. S. longitude: 063 deg. 04 min. W. elevation: 375m. remarks: Fruit hard, dark purple, cylindrical, to 30cm long. Flesh orange, pleasant fragrance. Seeds numerous, purplish-brown. Cultivated on an arbor at the botanical garden. Said to be the variety grown by local farmers. Cultivated. Seed.

### PI 560957. Solanum mammosum L. SOLANACEAE

Donated by: Williams, D.E., Agricultural Research Service -- USDA, National Germplasm Resources Lab., Bldg. 003, 4th Floor, Beltsville, Maryland 20705-2350, United States. Received February 13, 1991.

donor id: 1133. origin: Bolivia. local name: tetilla, pimenton (Spanish). collected: April 12, 1990. collector: D.E. Williams. collector id: 1133. other id: Grif 425. locality: Small village, Capaina, Iturralde Province, La Paz Dept. latitude: 14 deg. 25 min. S. longitude: 67 deg. 36 min. W. elevation: 225m. remarks: Woody shrub, 2m tall. Corolla purple. Stamens yellow. Fruits 8-9cm long, mammiform with 5 or 6 basal, inward curving outgrowths 3-4cm long. Color orange. Flesh thick, spongy. Seeds numerous, round, flattened, purple brown. Fruit said to be poisonous if eaten, but used medicinally to cure mange and rashes by rubbing fruit on sores. More importantly, the mere presence of this plant is believed to cause household chickens to procreate. Cultivated. Seed.

# PI 560958. Tephrosia vogelii Hook. f. FABACEAE

donor id: 1011. origin: Bolivia. local name: barbasco de hoja (Spanish), sat(r)e (Tacana). collected: September 25, 1989. collector: D.E. Williams. collector id: 1011. other id: Grif 426. locality: Carmen Florida. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 235m. remarks: Shrub to 2.5m. Flowers white. Fruits persistant, indehiscent. Seeds black with white hilum. Grown in chacos and dooryard gardens. Leaves are pounded and used as fish poison. Cultivated. Seed.

PI 560959 to 560960. Vigna unquiculata (L.) Walp. FABACEAE

Donated by: Williams, D.E., Agricultural Research Service -- USDA, National Germplasm Resources Lab., Bldg. 003, 4th Floor, Beltsville, Maryland 20705-2350, United States. Received February 13, 1991.

- PI 560959 donor id: 995. origin: Bolivia. local name: frejol blanco. collected: September 16, 1989. collector: D.E. Williams. collector id: 995. other id: Grif 427. locality: Carmen Florida. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 235m. remarks: Erect, bush type, to 40cm, with some branches running along ground. Outside of standard yellow, inside purple with 2 yellow spots near base. Wings purple. Keel white. Seeds cream. Grown on playa with maize, peanuts and rice. Cultivated. Seed.
- PI 560960 donor id: 997. origin: Bolivia. local name: frejol. collected: September 16, 1989. collector: D.E. Williams. collector id: 997. other id: Grif 428. locality: Carmen Florida. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 235m. remarks: Plant runner-type. Flowers creamy white. Seeds cream. Grown on playa. Cultivated. Seed.
- PI 560961. Vigna unquiculata subsp. sesquipedalis (L.) Verdc. FABACEAE

Donated by: Williams, D.E., Agricultural Research Service -- USDA, National Germplasm Resources Lab., Bldg. 003, 4th Floor, Beltsville, Maryland 20705-2350, United States. Received February 13, 1991.

donor id: 999. origin: Bolivia. local name: vainita. collected: September 16, 1989. collector: D.E. Williams. collector id: 999. other id: Grif 429. locality: Carmen Florida. latitude: 14 deg. 30 min. S. longitude: 67 deg. 30 min. W. elevation: 235m. remarks: Climbing vine. Standard white outsite, purple inside. Fruits very long, to 50cm. Fruits green, eaten whole. Seeds reddish. Grown on playa. Cultivated. Seed.

PI 560962. Vigna unquiculata (L.) Walp. FABACEAE

Donated by: Williams, D.E., Agricultural Research Service -- USDA, National Germplasm Resources Lab., Bldg. 003, 4th Floor, Beltsville, Maryland 20705-2350, United States. Received February 13, 1991.

donor id: 1041. origin: Bolivia. local name: frejol. collected: October 09, 1989. collector: D.E. Williams. collector id: 1041. other id: Grif 430. locality: Rurrenabaque. latitude: 14 deg. 28 min. S. longitude: 67 deg. 34 min. W. elevation: 227m. remarks: Cowpea grown locally on playas. Fruit 22cm long. Seed mottled light purple on tan, hilum white. Cultivated. Seed.

PI 560963 to 560966. Ilex hybrid AQUIFOLIACEAE

Donated by: Eisenbeiss, G., U.S. National Arboretum, USDA-ARS, 3501 New York Avenue, NE, Washington, District of Columbia 20002, United States. Received April 02, 1992.

- PI 560963 origin: United States. developed: W.F. Kosar. origin institute: U.S. National Arboretum, USDA-ARS, 3501 New York Avenue, NE, Washington, District of Columbia 20002 United States. source history: Originated from cross made 1963 at U.S. National Arboretum by W.F. Kosar (pedigree K-63-4-2), NA 28358. cultivar: VENUS. pedigree: Ilex [(aquifolium/cornuta) 'Nellie R. Stevens'/I. latifolia]. remarks: Large evergreen shrub to 18'. Numerous small spines on leaf margin. Female. Fruit red. Hardiness zone 7 on USDA Plant Hardiness Zone Map (1990). International Ilex cultivar registration 8-91. Selected and named by F.S. Santamour, Jr. and G.K. Eisenbeiss. Cultivar. Plant.
- PI 560964 origin: United States. developed: W.F. Kosar. origin institute: U.S. National Arboretum, USDA-ARS, 3501 New York Avenue, NE, Washington, District of Columbia 20002 United States. source history: Originated from cross made 1963 at U.S. National Arboretum by W.F. Kosar (pedigree K63-4-1), NA 28313. cultivar: ADONIS. pedigree: Ilex [(aquifolium/cornuta) 'Nellie R. Stevens'/I. latifolia]. remarks: Large evergreen shrub to 18'. Leaves large with numerous small spines on leaf margin. Male. Hardiness zone 7 on USDA Plant Hardiness Zone Map (1990). International Ilex cultivar registration 9-91. Selected and named by F.S. Santamour, Jr. and G.K. Eisenbeiss. Cultivar. Plant.

PI 560965 origin: United States. developed: W.F. Kosar. origin institute: U.S. National Arboretum, USDA-ARS, 3501 New York Avenue, NE, Washington, District of Columbia 20002 United States. source history: Originated from cross made 1963 at U.S. National Arboretum by W.F. Kosar (pedigree K62-19-3), NA 31330. cultivar: CORONET. pedigree: Ilex [(aquifolium/cornuta) 'Nellie R. Stevens'/I. ciliospinosa/(I./aquipernyi))]. remarks: Large evergreen shrub to 15'. Leaves soft, spiny. Female. Fruit red. Hardiness zone 7 on USDA Plant Hardiness Zone Map (1990). International Ilex cultivar registration 12-91. Selected by W.F. Kosar and named by G.K. Eisenbeiss. Cultivar. Plant.

PI 560966 origin: United States. developed: W.F. Kosar. origin institute: U.S. National Arboretum, USDA-ARS, 3501 New York Avenue, NE, Washington, District of Columbia 20002 United States. source history: Originated from cross made 1961 at U.S. National Arboretum by W.F. Kosar (pedigree K61-15-4), NA 28362. cultivar: MINATURE. pedigree: Ilex [(aquifolium/cornuta) 'Nellie R. Stevens'/I. pernyi]. remarks: Evergreen shrub to 8'. Leaves small, strongly spined. Female. Fruit red. Hardiness zone 7 on USDA Plant Hardiness Zone Map (1990). International Ilex cultivar registration 13-91. Selected and named by W.F. Kosar. Cultivar. Plant.

PI 560967. Ilex serrata Thunb. AOUIFOLIACEAE Japanese winterberry

Donated by: Eisenbeiss, G., U.S. National Arboretum, USDA-ARS, 3501 New York Avenue, NE, Washington, District of Columbia 20002, United States. Received April 02, 1992.

origin: United States. developed: G.K. Eisenbeiss.
origin institute: U.S. National Arboretum, USDA-ARS, 3501
New York Avenue, NE, Washington, District of Columbia
20002 United States. source history: Seed from Japan
1961 grown at U.S. National Arboretum. cultivar:
SUNDROPS. pedigree: Selection of PI 272055, NA 17022.
other id: NA 62386. remarks: Deciduous shrub to 8' tall
and 15' wide. Female. Fruit yellow. Hardiness zone 5 on
USDA Plant Hardiness Zone Map (1990). International Ilex
cultivar registration 14-91. Cultivar. Plant.

PI 560968. Pisum sativum var. arvense (L.) Poiret FABACEAE

Donated by: Muehlbauer, F.J., Agricultural Research Service -- USDA, Department of Agronomy & Soils, Washington State University, Pullman, Washington 99164, United States; and Kaiser, W.J., Western Regional PI Station, Washington State University, Pullman, Washington 99164, United States. Received February 14, 1992.

donor id: 190785-02. origin: Turkey. collected: 1985. collector: F.J. Muehlbauer, W.J. Kaiser. collector id: 190785-02. other id: W6 9808. group: W6. locality: Collected from field on road from Almus to Niksar, 18km from Niksar. elevation: 900m. remarks: Plants tall. Flowers purple. Cotyledons yellow. No mottling. received as: Pisum arvense. Cultivated. Seed.

PI 560969. Pisum sativum subsp. elatius (Steven ex M. Bieb.) Asch. & Graebner FABACEAE

Donated by: Muehlbauer, F.J., Agricultural Research Service -- USDA, Department of Agronomy & Soils, Washington State University, Pullman, Washington 99164, United States; and Kaiser, W.J., Western Regional PI Station, Washington State University, Pullman, Washington 99164, United States. Received February 14, 1992.

donor id: 190785-0105. origin: Turkey. collected: 1985. collector: F.J. Muehlbauer, W.J. Kaiser. collector id: 190785-0105. other id: W6 9809. group: W6. locality: Collected on rocky stony slope near water canal (small), on left side of road from Sivas to Tokat, about 5km from Tokat, 1km to Geyraz village. elevation: 750m. remarks: Plants mostly dry and shattered. Some annual grasses and legumes. received as: Pisum elatius. Wild. Seed.

PI 560970 to 560973. Pisum sp. FABACEAE

Donated by: Muehlbauer, F.J., Agricultural Research Service -- USDA, Department of Agronomy & Soils, Washington State University, Pullman, Washington 99164, United States; and Kaiser, W.J., Western Regional PI Station, Washington State University, Pullman, Washington 99164, United States. Received February 14, 1992.

PI 560970 donor id: 050785-0109. origin: Turkey. collected: 1985. collector: F.J. Muehlbauer, W.J. Kaiser. collector id: 050785-0109. other id: W6 9810. group: W6. locality: From threshing pile near Hayiz village. elevation: 380m. Wild. Seed.

# PI 560970 to 560973-continued

- PI 560971 donor id: 090785-03. origin: Turkey. collected: 1985. collector: F.J. Muehlbauer, W.J. Kaiser. collector id: 090785-03. other id: W6 9811. group: W6. locality: On road to Siverek, Karasadag (Kayarallari Park), 42km west of Diyarbakir. Wild. Seed.
- PI 560972 donor id: 290685-01. origin: Turkey. collected: 1985. collector: F.J. Muehlbauer, W.J. Kaiser. collector id: 290685-01. other id: W6 9812. group: W6. locality: On road to Yayladagi, 16km from Samandag. elevation: 430m. remarks: Only one plant, very dry and close to shattering. Wild. Seed.
- PI 560973 donor id: 270685-0105. origin: Turkey. collected: 1985. collector: F.J. Muehlbauer, W.J. Kaiser. collector id: 270685-0105. other id: W6 9813. group: W6. locality: 19km north side of road to Gulnar from Aydincik, Mersin Province. elevation: 790m. remarks: Plants dry, mostly shattered, single pod collected. Wild. Seed.
- PI 560974. Artocarpus altilis (Parkinson) Fosb. MORACEAE Breadfruit

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

donor id: KSZ-35. origin: Malaysia. local name:
Breadnut. collected: August 06, 1990. collector: R.J.
Knight, R.J. Schnell, F. Zee. collector id: KSZ-35.
locality: Tenom Station, Sabah. latitude: 05 deg. 08
min. N. longitude: 115 deg. 55 min. E. remarks: Seeded
breadnut used as rootstock for seedless forms. Slightly
dwarfing. received as: Artocarpus communis. Cultivated.
Seed.

PI 560975 to 560978. Artocarpus odoratissimus Blanco MORACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

- PI 560975 donor id: KSZ-2. origin: Malaysia. local name: Terap. collected: August 02, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-2. locality: Market, Kota Kinabalu, Philippine market. latitude: 05 deg. 58 min. N. longitude: 116 deg. 04 min. E. remarks: Fruit looks like a small jack fruit. Remove shell early ripened cluster of flesh covered seed. Pulp semi- translucent. Pulp flavor sweet, tart, good. Seed size small, (1cm in diameter). Seed texture smooth. Seed color whitish. Seeds edible when boiled. Wild. Seed.
- PI 560976 donor id: KSZ-13. origin: Malaysia. local name: Terap. collected: August 04, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-13. locality: Fruit stand, Tambunan. latitude: 05 deg. 38 min. N. longitude: 116 deg. 23 min. E. remarks: Fruit color brownish. Seeds small. Not as good as green ones. Cultivated. Seed.
- PI 560977 donor id: KSZ-17. origin: Malaysia. local name: Terap. collected: August 04, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-17. locality: Market fruit stand, Tambunan. latitude: 05 deg. 38 min. N. longitude: 116 deg. 23 min. E. remarks: Seed large. Pulp thick. Quality good. Smell strong. 33 seeds. Cultivated. Seed.
- PI 560978 donor id: KSZ-31. origin: Malaysia. local name: Terap. collected: August 06, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-31. locality: Small private holding near Agricultural Research Station, Tenom, Sabah. latitude: 05 deg. 08 min. N. longitude: l15 deg. 55 min. E. remarks: Tree evergreen, large. Crops of large fruit to 750cm. Fruit shape spherical. Fruit color brown. Fruit contains oblong brown edible seeds surrounded by white. Fruit pulp sweet. Cultivated. Seed.
- PI 560979 to 560983. Averrhoa carambola L. OXALIDACEAE Carambola

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

- PI 560979 donor id: KSZ-11. origin: Malaysia. local name:
  Carambola. collected: August 10, 1990. collector:
  R.J.Knight, R.J.Schnell, F.Zee. collector id: KSZ-11.
  other id: HAVE 25. source: NCGR-HILO. locality: Tenom
  Station. latitude: 05 deg. 08 min. N. longitude: 115
  deg. 55 min. E. remarks: Collectors id#:KSZ-11.
  Collected at Tenom Station. small, may be useful for
  rootstock. Perennial. Seed.
- PI 560980 donor id: KSZ-34. origin: Malaysia. source history:
  Collected from Tenom Station, Sabah, Malaysia. Donated
  by Mr. Anthony Lamb.. cultivar: B 17. local name:
  Belimbing Madu. collected: August 06, 1990. collector:
  R. Knight Jr., R. Schnell Jr., and F. Zee. collector id:
  KSZ-34. other id: HAVE 19. source: NCGR-HILO.
  locality: Tenom Station. latitude: 05 deg. 08 min. N.
  longitude: 115 deg. 55 min. E. remarks: Collectors
  id#:KSZ-34. Collected from Tenom Station. Donated by Mr.
  Anthony Lamb. Other cultivar names used are Honey' or
  'Belimbing Madu'. Perennial. Clone. Scion.
- donor id: KSZ-81. origin: Malaysia. origin institute: PI 560981 Malaysian Aq. Res. and Dev. Inst. (MARDI), Serdang Malaysia. source history: Collected from Malaysian Ag Research and Development Inst. (MARDI), germplasm collection at Serdang. Donated by Mr. Chan Ying Kwok, Deputy Director, MARDI.. cultivar: Bl. local name: Blimbi. collected: August 15, 1990. collector: R.J.Knight, R.J. Schnell, F. Zee. collector id: KSZ-81. other id: HAVE 20. source: NCGR-HILO. locality: Germplasm collection at Mardi Station, Serdang, Selangor. latitude: 03 deg. 18 min. N. longitude: 101 deg. 35 min. remarks: Collectors id#:KSZ-81. Collected from Malaysian Ag Research and Development Inst. (MARDI) germplasm collection at Serdang Donated by Mr. Chan Ying Kwok, Deputy Director, MARDI. Perennial. Clone. Scion.
- PI 560982 donor id: KSZ-82. origin: Malaysia. source history:
   Collected from MARDI germplasm collection at
   Serdang.Donated by Mr. Chan Ying Kwok, Deputy director of
   MARDI.. cultivar: B2. local name: Blimbi (Carambola).
   collected: August 15, 1990. collector:
   R.J.Knight,R.J.Schnell,F.Zee. collector id: KSZ-82.
   other id: HAVE 21. source: NCGR-HILO. locality:
   Germplasm collection at Mardi Station, Serdang, Selangor.
   latitude: 03 deg. 18 min. N. longitude: 101 deg. 35 min.
   E. remarks: Improved (sweet-flavored) cultivar of
   evergreen fruit tree native to Southeast Asia. Scions
   from Mr. Chan Ying Kwok, Mardi. Perennial. Clone.
   Scion.

#### PI 560979 to 560983-continued

PI 560983 donor id: KSZ-83. origin: Malaysia. source history:
Collected from MARDI germplasm collection at
Serdang.Donated by Mr. Chan Ying Kowk, Deputy Director,
MARDI.. cultivar: B 17. local name: Blimbi (Carambola).
collected: August 15, 1990. collector: F. Zee.
collector id: KSZ-83. other id: HAVE 22. source:
NCGR-HILO. locality: Germplasm collection at Mardi
Station, Serdang, Selangor. latitude: 03 deg. 18 min. N.
longitude: 101 deg. 35 min. E. remarks: Improved
cultivar, with unusually high sugar content, of an
evergreen fruit tree native to Southeast Asia. Scions
given by Mr. Chang Ying Kwok, Mardi. Perennial. Clone.
Scion.

#### PI 560984. Canarium decumanum Gaertner BURSERACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

donor id: KSZ-57. origin: Malaysia. collected: August 09, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-57. locality: Grounds of Ulu Dusun Agricultural Research Station, Sandakan, Sabah. latitude: 05 deg. 04 min. N. longitude: 118 deg. 53 min. E. remarks: Tree evergreen, tropical, tall. Fiber melts in mouth. Flesh sweet and sulfurous; nut is edible. 23 seeds. Wild. Seed.

# PI 560985. Citrus reticulata Blanco RUTACEAE Mandarin

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

donor id: KSZ-25. origin: Malaysia. local name: Wild mandarin. collected: August 05, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-25. locality: From trees in collection at Agricultural Research Station, Tenom, Sabah. latitude: 05 deg. 08 min. N. longitude: 115 deg. 55 min. E. remarks: Tree evergreen, small. High tolerance for root rot; may have value as rootstock. Fruit size small. Color green. Texture rough. Taste subacid. Wild. Seed.

PI 560986. Coffea sp. RUBIACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

donor id: KSZ-41. origin: Malaysia. cultivar: ROBUSTA.
local name: Surathani. collected: August 06, 1990.
collector: R.J. Knight, R.J. Schnell, F. Zee. collector
id: KSZ-41. locality: Tenom, Sabah. latitude: 05 deg.
08 min. N. longitude: 115 deg. 55 min. E. remarks: 22
seeds. Cultivated. Seed.

PI 560987. Durio grandiflorus (Masters) Kosterm. & Soeg.-Reks. BOMBACACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

donor id: KSZ-18. origin: Malaysia. collected: August 04, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-18. latitude: 05 deg. 08 min. N. longitude: 115 deg. 55 min. E. remarks: Ornamental. Aril reddish, some whitish. Seed shrivelled, some (2) no color. Gift from Tony Lamb. Cultivated. Seed.

PI 560988. Durio oxleyanus Griffith BOMBACACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

#### PI 560988-continued

donor id: KSZ-24. origin: Malaysia. local name: Durian sukang. collected: August 05, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-24. locality: Tenom market, Sabah. latitude: 05 deg. 08 min. N. longitude: 115 deg. 55 min. E. remarks: Tree forest evergreen. Fruit green, deeply spiny, slightly oblong (12 x 15cm), 500g wt. Fruit odor sulfurous. Fruit flesh deep yellow, relatively thin, fibrous, taste sweet and oily, sl. sulfurous, sl. caustic but appealing. May have value in breeding or as rootstock for common durian. Wild. Seed.

# PI 560989. Durio sp. BOMBACACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

donor id: KSZ-1. origin: Malaysia. collected: August 02, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-1. locality: Market, Kota Kinabalu. latitude: 05 deg. 58 min. N. longitude: 116 deg. 04 min. E. remarks: Fruit spherical, crack, very spiny yellow shell. Stem and blossom end flat. Flesh taste not sweet. Flesh odor none. Taste bland. Texture waxy. Color orange-yellow. Seed smooth. Aril unfold readily. Related to common durian. Wild. Seed.

# PI 560990 to 560991. Garcinia hombroniana Pierre CLUSIACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

PI 560990 donor id: KSZ-22. origin: Malaysia. local name:
Mangosteen Utan. collected: August 05, 1990. collector:
R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-22.
locality: Tenom Station. latitude: 05 deg. 08 min. N.
longitude: 115 deg. 55 min. E. remarks: Fruit red. Soil
sandy. Graft compatible to mangosteen. Tolerable to some
salt breeze. Wild. Seed.

#### PI 560990 to 560991-continued

PI 560991 donor id: KSZ-23. origin: Malaysia. local name:
Mangosteen Utan. collected: August 05, 1990. collector:
R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-23.
locality: Tenom Station. latitude: 05 deg. 08 min. N.
longitude: l15 deg. 55 min. E. remarks: Fruit red.
Different tree from KSZ-22. Wild. Seed.

# PI 560992. Garcinia mangostana L. CLUSIACEAE Mangosteen

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

donor id: KSZ-51. origin: Malaysia. local name: Manggis (Mangosteen). collected: August 08, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-51. locality: Ulu Dusun Agricultural Experiment Station, Sandakan, Sabah. latitude: 05 deg. 04 min. N. longitude: 118 deg. 53 min. E. remarks: Tree evergreen, moderate size. Fruit flavor excellent. Fruit color purple. Fruit size and shape like that of a tangerine. 8 seeds. Cultivated. Seed.

## PI 560993. Lansium domesticum Corr. MELIACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

donor id: KSZ-47. origin: Malaysia. local name:
Langsat. collected: August 08, 1990. collector: R.J.
Knight, R.J. Schnell, F. Zee. collector id: KSZ-47.
locality: Ulu Dusun Agricultural Research Station,
Sandakan, Sabah. latitude: 05 deg. 04 min. N.
longitude: 118 deg. 53 min. E. remarks: Tree evergreen,
small, with fruit that hangs in stringy clusters. Fruit
large, to 4.5cm long by 4cm in diameter. Fruit taste tart
and refreshing. 25 seeds. Cultivated. Seed.

# PI 560994. Litsea garciae S. Vidal LAURACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

donor id: KSZ-60. origin: Malaysia. local name: Medang. collected: August 12, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-60. locality: Public market, Kuching, Sarawak. latitude: 01 deg. 32 min. N. longitude: 110 deg. 19 min. E. remarks: Tree evergreen. Fruit shape spherical, flattened (slightly pointed). Fruit color rose-pink. Fruit size of 50-60g, 5-7cm in diameter with thick green discoid persistent calyx. Fruit flesh thin (5-7mm), greenish-white, oily, not sweet. Avocado wild relative for National Clonal Repository. 20 seeds. Wild. Seed.

# PI 560995. Mangifera applanata ANACARDIACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

donor id: KSZ-29. origin: Malaysia. collected: August 05, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-29. locality: Wild tree growing on grounds of Agricultural Research Station, Tenom, Sabah. latitude: 05 deg. 08 min. N. longitude: 115 deg. 55 min. E. remarks: Tree huge, native to Western Borneo. 5 seedling plants collected from beneath mother tree (20 meters high). Apparently monoembryonic. received as: Mangifera applanta. Wild. Plant.

### PI 560996. Mangifera casturi ANACARDIACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

### PI 560996-continued

donor id: KSZ-39. origin: Malaysia. local name: Kasturi (Indonesia). collected: August 06, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-39. locality: Germplasm collection at Agricultural Research Station, Tenom, Sabah. latitude: 05 deg. 08 min. N. longitude: 115 deg. 55 min. E. remarks: Tree evergreen, tropical. Related to cultivated Mango. 10 pieces of scionwood. Native to Kalimantan, Indonesia. received as: Mangifera casturi. Cultivated. Scion.

PI 560997. Mangifera decandra Ding Hou ANACARDIACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

donor id: KSZ-58. origin: Malaysia. local name: Bedu dahau. collected: August 09, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-58. locality: Grounds of Ulu Dusun Agricultural Experiment Station, Sandakan, Sabah. latitude: 05 deg. 04 min. N. longitude: 118 deg. 53 min. E. remarks: Tree evergreen, tall. Leaves large, simple, oblong-lanceolate. Fruit long, kidney shaped. Fruit color dark reddish brown. Fruit flesh white, fibrous, sour. Relative of cultivated mango that may have use in breeding or as a stock for the mango. 10 seeds. Wild. Seed.

PI 560998 to 560999. Mangifera foetida Lour. ANACARDIACEAE Bachang

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

PI 560998 donor id: KSZ-7. origin: Malaysia. local name: Mangga pau. collected: August 02, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-7. locality: Tenom, Sabah. latitude: 05 deg. 08 min. N. longitude: 115 deg. 55 min. E. remarks: Gift from Tony Lamb. 4 seeds. Wild. Seed.

### PI 560998 to 560999-continued

- PI 560999 donor id: KSZ-67. origin: Malaysia. local name: Mangga pau. collected: August 13, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-67. locality: Public market between Kuching and Lundu, Sarawak. latitude: 01 deg. 30 min. N. longitude: 110 deg. 16 min. E. remarks: Tree evergreen, tall. Fruit color green. Fruit shape and size cylindrical, (7x10cm, 250-300gms) with prominent protuberance just below the apex. Fruit odor strong turpentine, much sooty mold. Fruit flesh deep yellow, fibrous, acid and sulfurous. 13 seeds. Wild. Seed.
- PI 561000 to 561005. Mangifera indica L. ANACARDIACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

- PI 561000 donor id: KSZ-3. origin: Malaysia. local name: Mangga air. collected: August 02, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-3. locality: Tenom, Sabah. latitude: 05 deg. 08 min. N. longitude: 115 deg. 55 min. E. remarks: Fruit small 250-300g. Color greenish-yellow. Kidney shaped. Resembles small mango. Fruit flesh fibrous, pale yellow, no terp, polyembryonic. Gift from Tony Lamb as M. laurina. received as: Mangifera laurina. Wild. Seed.
- PI 561001 donor id: KSZ-14. origin: Malaysia. local name: Mangga air. collected: August 04, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-14. locality: Bought at first market between Kota Kinabalu and Tenom. latitude: 05 deg. 53 min. N. longitude: 116 deg. 14 min. E. received as: Mangifera laurina. Cultivated. Seed.
- PI 561002 donor id: KSZ-16. origin: Malaysia. local name: Mangga air. collected: August 04, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-16. locality: First market between Kota Kinabalu and Tenom. latitude: 05 deg. 53 min. N. longitude: 116 deg. 14 min. E. remarks: Fruit small, attractive. Color bright yellow. Taste sweet. Minimun disease. No terp. Flesh color slight red blush. Flesh taste very sweet, good. Flesh fiber moderate and little. received as: Mangifera laurina. Cultivated. Seed.

- PI 561003 donor id: KSZ-33. origin: Malaysia. local name: Mangga air. collected: August 06, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-33. locality: Grounds of Agricultural Research Station, Tenom, Sabah. latitude: 05 deg. 08 min. N. longitude: 115 deg. 55 min. E. remarks: Tree evergreen. Fruit small. Resistant to anthracnose disease. Record also reads, "Prob. cult. in this region for 500 years--". J. Bompard. received as: Mangifera laurina. Cultivated. Seed.
- PI 561004 donor id: KSZ-62. origin: Malaysia. local name: Mangga Air. collected: August 12, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-62. locality: Home of Khusari, Santubong Village, Vicinity of Kuching, Sarawak. latitude: 01 deg. 45 min. N. longitude: 110 deg. 19 min. E. remarks: Species closely related to cultivated mango, with resistance to anthracnose disease. 10 scions. received as: Mangifera laurina. Cultivated. Scion.
- PI 561005 donor id: KSZ-66. origin: Malaysia. local name: Mangga. collected: August 12, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-66. locality: Growing in yard behind a store at Santubong Village. latitude: 01 deg. 45 min. N. longitude: 110 deg. 19 min. E. remarks: Fruit shape long, color green. Relatively free of disease. M indica fruits poorly here, so this productive specimen may be of value. 4 seeds. Polyembryonic. Cultivated. Seed.
- PI 561006 to 561008. Mangifera odorata Griffith ANACARDIACEAE Kwini

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

PI 561006 donor id: KSZ-10. origin: Malaysia. local name: Kweni. collected: August 04, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-10. locality: Market between Kota Kinabalu and Tenom. latitude: 05 deg. 51 min. N. longitude: 116 deg. 09 min. E. remarks: Tree evergreen, tall. From Southeast Asia. Related to cultivated mango. Kidney shaped 15x75cm, 200-275cm. Fruit Color green. Some anthracnose. Fruit flesh light yellow, fibrous, sweet. Cultivated. Seed.

PI 561007 donor id: KSZ-61. origin: Malaysia. local name: Kwini. collected: August 12, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-61. locality: Santubong Village (near Kuching), Sarawak. latitude: Ol deg. 45 min. N. longitude: 110 deg. 19 min. E. remarks: Tree evergreen, large. Kidney shaped. Fruit color green. Fruit size about 15x12cm. Fruit smell strongly aromatic. Flesh color yellow, fibrous. Seed polyembryonic. Relative of cultivated mango. 5 seeds. Cultivated. Seed.

PI 561008 donor id: KSZ-65. origin: Malaysia. local name: Kwini. collected: August 12, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-65. locality: Kuching public market, Sarawak. latitude: 01 deg. 32 min. N. longitude: 110 deg. 19 min. E. remarks: Tree evergreen. Related to mango. 4 seeds. Polyembryonic. Cultivated. Seed.

PI 561009. Mangifera pajang Kosterm. ANACARDIACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

donor id: KSZ-28. origin: Malaysia. local name: Payang. collected: August 05, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-28. locality: Bought at Tenom market, Sabah. latitude: 05 deg. 08 min. N. longitude: 115 deg. 55 min. E. remarks: Tree evergreen, large. Fruit large 12x15cm, weight 1.5-2.5kg, color brown. Skin thick, scurly. Fruit flesh fibrous, color orange. Smell strongly sulfurous. Taste sweet and acid. 7 seeds. Monoembryonic. Of interest for genetic studies, possibly for breeding. Wild. Seed.

PI 561010. Mangifera pentandra Hook. f. ANACARDIACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

#### PI 561010-continued

donor id: KSZ-42. origin: Malaysia. local name: Pau damar. collected: August 07, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-42. locality: Sinsuran area, Sabah. latitude: 05 deg. 44 min. N. longitude: 116 deg. 23 min. E. remarks: Tree evergreen, similar to mango. Distinguished by flowers with 5 anthers (instead of one). Fruit small (90-125g). Fruit seed large. Taste sweet. 7 scions. Cultivated. Scion.

# PI 561011. Mangifera quadrifida Jack ex Wallich ANACARDIACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

donor id: KSZ-70. origin: Malaysia. local name: Kumbang. collected: August 13, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-70. locality: Mile 13, Kuching - Lundu Road, Sarawak, on banks of Straw River. latitude: 01 deg. 23 min. N. longitude: 110 deg. 12 min. E. remarks: Tree evergreen, large. Related to cultivated mango. Not in fruit this date. 15 scions. Wild. Scion.

### PI 561012. Mangifera sp. ANACARDIACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

donor id: KSZ-71. origin: Malaysia. collected: August 13, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-71. locality: Mile 13, Kuching-Lundu Road, Sarawak, on banks of Straw River. latitude: 01 deg. 23 min. N. longitude: 110 deg. 12 min. E. remarks: 3 seedling plants growing under Mangifera graffithii and M. quadrifida. Wild. Plant.

PI 561013 to 561014. Mangifera similis Blume ANACARDIACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

- PI 561013 donor id: KSZ-6. origin: Malaysia. local name: Bunitan or Falimantan. collected: August 02, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-6. locality: Tenom, Sabah. latitude: 05 deg. 08 min. N. longitude: 115 deg. 55 min. E. remarks: Gift from Tony Lamb. received as: Mangifera torquenda. Wild. Seed.
- PI 561014 donor id: KSZ-27. origin: Malaysia. local name: Bunitan or Falimantan. collected: August 05, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-27. locality: Tenom, Sabah. latitude: 05 deg. 08 min. N. longitude: 115 deg. 55 min. E. remarks: Fruit size small (250-300g), round, Color green. Monoembryonic. Fruit flesh fibrous. No weevils. Gift from Tony Lamb. received as: Mangifera torquenda. Wild. Seed.
- PI 561015 to 561018. Nephelium lappaceum L. SAPINDACEAE Rambutan

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

\* PI 561015 Nephelium lappaceum L. var. lappaceum SAPINDACEAE rambutan donor id: KSZ-4. origin: Malaysia. local name: Rambutan. collected: August 01, 1990. collector: R. J. Knight Jr., R. Schnell Jr., F. Zee.. collector id: KSZ-4. other id: HNEP 31. source: NCGR-HILO. locality: Market, Kota Kinabalu, Philippine market. latitude: 05 deg. 58 min. N. longitude: 116 deg. 04 min. E. remarks: Collectors id#:KSZ-4. Collected at open market in Kota Kina- balu, Sabah. Open pollinated seeds form an unknown grafted variety. seed somewhat readily. Semi free stone. Perennial. Cultivated. Seed.

- \* PI 561016 Nephelium lappaceum L. var. lappaceum SAPINDACEAE rambutan donor id: KSZ-5. origin: Malaysia. local name: Rambutan. collected: August 01, 1990. collector: R. Knight Jr., R. Schnell Jr., F. Zee. collector id: KSZ-5. other id: HNEP 30. source: NCGR-HILO. locality: Market, Kota Kinabalu, Philippine market. latitude: 05 deg. 58 min. N. longitude: l16 deg. 04 min. E. remarks: Collectors id#:KSZ-5. Collected from an open market at Kota Kinabalu, Sabah. Seeds from an unknown grafted cultivar. Perennial. Cultivated. Seed.
- \* PI 561017 Nephelium lappaceum L. var. lappaceum SAPINDACEAE rambutan donor id: KSZ-8. origin: Malaysia. local name: Rambutan. collected: August 03, 1990. collector: R. Knight Jr., R. Schnell Jr., F. Zee. collector id: KSZ-8. other id: HNEP 33. source: NCGR-HILO. locality: Tree #1 at farmer's orchard, Tuaran-Sabah. latitude: 06 deg. 11 min. N. longitude: 116 deg. 14 min. E. remarks: Collectors id#:KSZ-8. Collected from an orchard in Tuaran, Sabah. variety, but do not have information. Damage on fruit even from No moth (CoCo moth). Other tree (different variety) had larvae in fruit. Perennial. Cultivated. Seed.
- \* PI 561018 Nephelium lappaceum L. var. lappaceum SAPINDACEAE rambutan donor id: KSZ-85. origin: Malaysia. origin institute: Malaysian Ag. Res. and Dev. Inst.(MARDI), Selangor Malaysia. cultivar: Muar Gading. local name: Rambutan. collected: August 15, 1990. collector: R.J. Knight, R.J. Schnell, F. ZEE. collector id: KSZ-85. other id: HNEP 38. source: NCGR-HILO. locality: Germplasm collection at Mardi Station, Serdang, Selangor. latitude: 03 deg. 18 min. N. longitude: 101 deg. 35 min. E. remarks: Collectors id#:KSZ-85. Collected from MARDI germplasm field at Serdang. Donated by Mr. Chan Ying Kwok, Deputy Director, MARDI. Perennial. Clone. Scion.

PI 561019 to 561021. Nephelium lappaceum var. pallens (Hiern) Leenh. SAPINDACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

- PI 561019 donor id: KSZ-54. origin: Malaysia. source history:
  From one of the original trees collected by Mr. Anthony
  Lamb from a native Malaysian forest in Ulu Dusun/Manjang
  area in 1975.. local name: Wild rambutan. collected:
  August 09, 1990. collector: R. Knight Jr., R. Schnell
  Jr. and F. Zee. collector id: KSZ-54. other id: HNEP
  35. source: NCGR-HILO. locality: Grounds of Ulu Dusun
  Agricultural Research Station, Sandakan, Sabah.
  latitude: 05 deg. 04 min. N. longitude: 118 deg. 53 min.
  E. remarks: Collectors id#:KSZ-54. Collected at Ulu
  Dusun Station, San- dakan, Sabah. Donated by Mr. William
  Wong. Seedling of local wild plant. Tree 1. Perennial.
  Wild. Seed.
- PI 561020 donor id: KSZ-55. origin: Malaysia. source history:
  From one the original trees collected by Mr. Anthony Lamb
  from a native Malaysian forest in Ulu Dusun/Manjang area
  in 1975.. local name: Wild rambutan. collected: August
  09, 1990. collector: R. Knight Jr., R. Schnell Jr. and
  F. Zee. collector id: KSZ-55. other id: HNEP 36.
  source: NCGR-HILO. locality: Grounds of Ulu Dusun
  Agricultural Research Station, Sandakan, Sabah.
  latitude: 05 deg. 04 min. N. longitude: 118 deg. 53 min.
  E. remarks: Collectors id#:KSZ-55. Collected at the Ulu
  Dusun Station, Sandakan, Sabah. Donated by Mr. William
  Wong. local wild plant. Tree 2. Perennial. Wild. Seed.
- PI 561021 donor id: KSZ-56. origin: Malaysia. source history:
  From one of the wild trees originally collected by Mr.
  An- thony Lamb from a native Malaysian forest in Ulu
  Dusun/Man- jang area in 1975.. local name: Wild
  rambutan. collected: August 09, 1990. collector: R.
  Knight Jr., R. Schnell Jr., and F. Zee. collector id:
  KSZ-56. other id: HNEP 37. source: NCGR-HILO.
  locality: Grounds of Ulu Dusun Agricultural Research
  Station, Sandakan, Sabah. latitude: 05 deg. 04 min. N.
  longitude: 118 deg. 53 min. E. remarks: Collectors
  id#:KSZ-56. Collected at Ulu Dusun Station, San- dakan,
  Sabah. Donated by Mr. William Wong. plant. Tree 3 (2018).
  Perennial. Wild. Seed.
- PI 561022. Nephelium cuspidatum var. robustum (Radlk.) Leenh. SAPINDACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

#### PI 561022-continued

donor id: KSZ-21. origin: Malaysia. local name: Giant
rambutan. collected: August 15, 1990. collector: R.
Knight Jr., R. Schnell, Jr. and F. Zee. collector id:
KSZ-21. other id: HNEP 39. source: NCGR-HILO.
locality: Tenom Station. latitude: 05 deg. 08 min. N.
longitude: l15 deg. 55 min. E. remarks: Collectors
id#:KSZ-21. Donated by Mr. Anthony Lamb from trees
maintained at the Tenom Agricultural Experiment Station, Sabah. Perennial. Cultivated. Seed.

PI 561023. Nephelium ramboutan-ake (Labill.) Leenh. SAPINDACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

donor id: KSZ-12. origin: Malaysia. local name:
Rambutan ake, Pulasan. collected: August 04, 1990.
collector: R. Knight Jr., R. Schnell Jr. and F. Zee.
collector id: KSZ-12. other id: HNEP 34. source:
NCGR-HILO. locality: Tenom Station. latitude: 05 deg.
08 min. N. longitude: l15 deg. 55 min. E. remarks:
Collectors id#:KSZ-12. Collected at Tenom Station, Sabah,
donated by Mr. Anthony Lamb. received as: Nephelium
mutabile. Perennial. Seed.

PI 561024. Pleiospermium latialatum Swingle RUTACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

donor id: KSZ-26. origin: Malaysia. collected: August 05, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-26. locality: Citrus Collection, Agricultural Research Station, Tenom, Sabah. latitude: 05 deg. 08 min. N. longitude: 115 deg. 55 min. E. remarks: Tree evergreen, small. Fruit spherical berries like small oranges. Fruit size 3cm in diameter. Fruit color grayish green. Fruit taste sharply acid. Citrus relative of possible interest for National Clonal Repository. Wild. Seed.

PI 561025. Psidium quajava L. MYRTACEAE Guava

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

donor id: KSZ-84. origin: Malaysia. cultivar: THAI MAROON. collected: August 10, 1990. collector: R.J. Knight, R.J. Schnell, F.Zee. collector id: KSZ-84. other id: HPSI 41. source: NCGR-HILO. locality: Germplasm collection at Mardi Station, Serdang, Selangor. latitude: 03 deg. 18 min. N. longitude: 101 deg. 35 min. E. remarks: Collectors id#:KSZ-84. Scionwood received by CR-Hil from MARDI, Serdang, Selangor. Donated by Mr. Chan Ying Kwok, Dep- uty Director, MARDI. Perennial. Cultivar. Scion.

PI 561026. Sauropus androgynus (L.) Merr. EUPHORBIACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

donor id: KSZ-59. origin: Malaysia. local name: Sayor Manis. collected: August 10, 1990. collector: R.J. Knight, R.J. Schnell, F. Zee. collector id: KSZ-59. locality: Orchard of Mr. Chu Yat San at Sungeilubu, Sandakan, Sabah. latitude: 06 deg. 14 min. N. longitude: 117 deg. 23 min. E. remarks: Perennial herbaceous. Size up to 2 meters in height. Shoots green. Popular vegetable that brings good prices in Borneo. 8 green cuttings 12cm long. Cultivated. Cutting.

PI 561027. Syzygium aqueum (Burm. F.) Alst. MYRTACEAE

Donated by: Knight, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Florida 33158, United States; and Schnell, R.J., Subtropical Horticulture Research Unit, 13601 Old Cutler Road, Miami, Hawaii 33158, United States; and Zee, F., USDA-ARS, 461 West Lanikaula Street, P.O. Box 4487, Hilo, Hawaii 96720, United States. Received August 26, 1991.

donor id: KSZ-77. origin: Malaysia. cultivar:
INDONESIAN GIANT. local name: Wax jambu. collected:
August 14, 1990. collector: R.J. Knight, R.J. Schnell,
F. Zee. collector id: KSZ-77. locality: 2 marcots
bought from Tropical Fruit Tree Nursery, Kuching,
Sarawak. latitude: 01 deg. 32 min. N. longitude: 110
deg. 19 min. E. remarks: Tree evergreen, large. Fruit
waxy, pear shaped. Fruit color dark red. Growing in
popularity here. This crop shows promise for Florida,
Hawaii and the Caribbean. 2 plants. Cultivated. Plant.

PI 561028 to 561035. Triticum aestivum L., nom. cons. POACEAE Club wheat

Donated by: Allan, R.E., Agricultural Research Service -- USDA, Washington State University, Pullman, Washington 99164-6420, United States; and Washington Agr. Exp. Sta.. remarks: Three Strawbreaker Foot Rot Resistant Wheat Germplasm Lines. Received March 23, 1992.

origin: United States. developed: R.E. Allan. origin PI 561028 institute: USDA-ARS/Washington Agric. Exp. Station, Washington State University, 209 Johnson Hall, Pullman, Washington 99164-6420 United States. origin institute id: WA 7526. pedigree: Bulk of 70 lines: Tres/Tyee, Tres/SU92/6\*OM/WST/2\*OM, Tres/14/5\*OM/SP/2\*OM, Tres/SU92/6\*OM/Ibis/2\*OM, Tres/14/5\*OM/MS/2\*OM, Tres/SU92/6\*OM/DC/2\*OM, Tres/SU92/6\*OM/2629/2\*OM. other id: A8810. remarks: 1 gene (Rht2) winter-type semidwarf with awnless to awnletted compact spikes having soft white kernels. Glume color mainly white, 5% red. Entry in Western Reg. SWW Nursery (1987-90). Flowering midseason. Test wt. avg. 10g L-1 < Tres. Has heterogeneous resist. to P. striiformis, P. recondita, T. caries/foetida. 60% of seedlings resist. CDL-1 of P. striiformis. Milling & baking quality = to Tres. Milling score, cake vol., and sponge cake score lower than Hyak. Cookie diameter < Moro. Winter Annual. Breeding Material. Seed.

- PI 561029 origin: United States. developed: R.E. Allan. origin institute: USDA-ARS/Washington Agric. Exp. Station, Washington State University, 209 Johnson Hall, Pullman, Washington 99164-6420 United States. origin institute id: WA 7665. pedigree: Tyee//Cappelle Desprez/Tres. other id: A8825. remarks: 1 gene (Rht2) semidwarf winter wheat with compact white glume-awnless spikes & soft white kernels. 3cm shorter than Tres. T. wt. 23g L-1 lower than Tres. Heads I day earlier than Tres. Tested in 18 Western Reg. SWW tests (1989-90). Moderate resist. to strawbreaker foot rot. Seedling resist. to CDL-1, 20, 41 of P. striiformis. Suscept. to leaf & stem rust. Resist. to Sept. nodorum. Less coldhardy than Tres. Club wheat quality satisfactory yet sometimes questionable sponge cake score & cookie diameter. Winter Annual. Breeding Material. Seed.
- PI 561030 origin: United States. developed: R.E. Allan, G.L. Rubenthaler, C.F. Morris, R.F. Line. origin institute: Agricultural Research Service -- USDA, Washington State University, 209 Johnson Hall, Pullman, Washington 99164-6420 United States. origin institute id: WA 7666. pedigree: VPM/Moisson 951//CI13438. other id: A8815. other id: GP-356. group: CSR-WHEAT. restricted: CSR. remarks: Standard ht., white chaff-bearded, common winter wheat with soft white kernels. Tested in Western Reg. SWW Nursery (1989 -1990). Heading date mid-late. Plant 25% taller than Nugaines. Has Pchl gene for strawbreaker foot rot resist. Mod. to intermediate seedling resist. to CDL-1, 20, 41 of stripe rust & field resist. to stripe rust & leaf rust. Suscept. to septoria glume & leaf blotch. Milling score, cookie diameter & sponge cake volume satisfactory. Viscosity high. Winter Annual. Breeding Material. Seed.
- origin: United States. developed: R.E. Allan. origin PI 561031 institute: USDA-ARS/Washington Agric. Exp. Station, Washington State University, 209 Johnson Hall, Pullman, Washington 99164-6420 United States. origin institute id: WA 7625. pedigree: VPM/Moisson 951//2\*Hill81. id: A8725. remarks: 1 gene (Rhtl) semidwarf, white glume-bearded spike winter wheat with soft white kernels. Has Pchl gene for resist. to strawbreaker foot rot. Resist. to prevalent races of pathogens causing stripe rust, leaf rust, & stem rust. Heads 2 days later than Nugaines. Sib of Madsen. Tested in Western Reg. SWW Nursery (1988-1989). Milling score, flour yield, absorption & sponge cake volume higher than Nugaines & Stephens. Cookie diameter sometimes smaller, Udon noodle rating lower, and viscosity higher than Nugaines, & Stephens. Winter Annual. Breeding Material. Seed.

- origin: United States. developed: R.E. Allan. origin PI 561032 institute: USDA-ARS/Washington Agric. Exp. Station, Washington State University, 209 Johnson Hall, Pullman, Washington 99164-6420 United States. origin institute id: WA 7624. pedigree: VPM/Moisson 951/Peck/Stephens//Daws. other id: A8829. remarks: 1 gene semidwarf, with lax bearded white glume spike & soft white kernels. Heads 2 days later than Stephens. Grain volume wt. usually lower than Daws (35g L-1). Plant ht. 9cm shorter than Daws. Tested in the Western Req. SWW Wheat nurseries (1988-1989). Has Pchl gene for resist. to Strawbreaker foot rot, & gave resist. reactions in field to stripe rust & leaf rust. Cookie diameter questionable. Sponge cake volume very good. Milling score high. Winter Annual. Breeding Material. Seed.
- origin: United States. developed: R.E. Allan, G.L. PI 561033 Rubenthaler, C.F. Morris, R.F. Line. origin institute: Agricultural Research Service -- USDA, Washington State University, 209 Johnson Hall, Pullman, Washington 99164-6420 United States. origin institute id: WA 7437. pedigree: Paha//CI13645/2\*Chinese Spring/Agropyron elongatum/Pawnee///2\*Omar. other id: A85117. other id: GP-355. group: CSR-WHEAT. restricted: CSR. remarks: 1 gene semidwarf (Rht2) winter wheat with compact red glumed-awnless spikes & soft white kernels. Heads late, 6 days after Paha, & 7cm < Paha. Grain vol. = Paha. Tolerant to both strawbreaker foot rot & cephalosporium stripe. Field resist. to stripe rust stable. Partial resist. to stem & leaf rust. Tested in Western Reg. SWW trials (1986-1987). Flour yield, milling score and cookie diameter quality average to questionable. Absorption & viscosity high. Sponge cake volume & score good. Winter Annual. Breeding Material. Seed.
- origin: United States. developed: R.E. Allan. origin PI 561034 institute: USDA-ARS/Washington Agric. Exp. Station, Washington State University, 209 Johnson Hall, Pullman, Washington 99164-6420 United States. origin institute id: WA 7435. pedigree: WA4303/Purdue sel.//820/Omar/1834/PI 178383. other id: A85186. remarks: 2 gene (Rhtl & Rht2) semidwarf white glume-bearded common spike with soft white grains. Tested in Western Reg. SWW Nursery (1986-1987). Plant ht. 80% of Nugaines. Heads 2 days later than Nugaines. Mixing stronger, viscosity higher & sponge cake volume larger than Nugaines & Stephens. Absorption higher & flour yield lower than Stephens. Moderate to intermediate resist. to stripe rust. Moderately suscept. to leaf rust. Resist. or partially resist. to T23, T29, T30 and T43 races of common bunt fungus. Winter Annual. Breeding Material. Seed.

PI 561035 origin: United States. developed: R.E. Allan, G.L. Rubenthaler, C.F. Morris, R.F. Line. origin institute: Agricultural Research Service -- USDA, Washington State University, 209 Johnson Hall, Pullman, Washington 99164-6420 United States. origin institute id: WA 7217. pedigree: VPM/Moisson 951//2\*Barbee. other id: A8541. other id: GP-354. group: CSR-WHEAT. restricted: CSR. remarks: 1 gene (Rht2) red chaff bearded club with soft white grain. Tested in the Western Reg. SWW Nursery (1985-1987). Heading date & ht. = Barbee. Has Pchl gene for strawbreaker foot rot resist. Mod. tolerance to cephalosporium stripe. Has 1 & possibly 2 genes for resist. to some P. striiformis races. Resist. to several races of common bunt fungus. Rated as having promising overall soft white wheat quality 2 of 3 yrs. by the ARS-Western Wheat Quality Lab. Winter Annual. Breeding Material. Seed.

PI 561036. Oryza sativa L. POACEAE Rice

Donated by: Mitsubishi Kasei Corporation, Japan. Received April 03, 1992.

origin: Japan. origin institute: Mitsubishi Kasei Corporation Japan. cultivar: YUMEKAORI. other id: PVP 9200125. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 561037. Poa pratensis L. POACEAE Kentucky bluegrass

**Donated by:** Jacklin Seed Company, United States. Received April 03, 1992.

origin: United States. origin institute: Jacklin Seed Company United States. cultivar: NUBLUE. other id: PVP 9200126. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 561038. Poa pratensis L. POACEAE Kentucky bluegrass

**Donated by:** Jacklin Seed Company, United States. Received April 03, 1992.

origin: United States. origin institute: Jacklin Seed Company United States. cultivar: NUSTAR. other id: PVP 9200127. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 561039. Dactylis glomerata L. POACEAE Orchardgrass

Donated by: Snow Brand Seed Company, United States. Received April 03, 1992.

origin: United States. origin institute: Snow Brand Seed Company United States. cultivar: HAYKING II. other id: PVP 9200128. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 561040. Poa pratensis L. POACEAE Kentucky bluegrass

Donated by: Pure Seed Testing, Inc., United States. Received April 03, 1992.

origin: United States. origin institute: Pure Seed Testing, Inc. United States. cultivar: UNIQUE. other id: PVP 9200129. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 561041. Citrullus lanatus (Thunb.) Matsum. & Nakai CUCURBITACEAE Watermelon

Donated by: Rogers NK Seed Company, United States. Received April 03, 1992.

origin: United States. origin institute: Rogers NK Seed Company United States. cultivar: NV 4317. other id: PVP 9200130. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 561042. Phaseolus vulgaris L. FABACEAE Dry bean

Donated by: Sacramento Valley Milling, Inc., California, United States. Received April 03, 1992.

origin: United States. origin institute: Sacramento
Valley Milling, California United States. cultivar:
37-16. other id: PVP 9200131. source: Pending. group:
PVPO. patent: PVPO. Cultivar. Seed.

PI 561043. Festuca arundinacea Schreber POACEAE Tall fescue

Donated by: Pure-Seed Testing, Inc., United States. Received April 03, 1992.

origin: United States. origin institute: Pure-Seed Testing, Inc. United States. cultivar: BONANZA II. other id: PVP 9200132. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 561044. Festuca arundinacea Schreber POACEAE Tall fescue

Donated by: Pure-Seed Testing, Inc., United States. Received April 03, 1992.

origin: United States. origin institute: Pure-Seed Testing, Inc. United States. cultivar: VIRTUE. other id: PVP 9200133. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 561045. Phaseolus vulgaris L. FABACEAE Garden bean

Donated by: Rogers NK Seed Company, United States. Received April 03, 1992.

origin: United States. origin institute: Rogers NK Seed Company United States. cultivar: MIRADA. other id: PVP 9200134. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 561046. Phaseolus vulgaris L. FABACEAE Garden bean

**Donated by:** Rogers NK Seed Company, United States. Received April 03, 1992.

origin: United States. origin institute: Rogers NK Seed Company United States. cultivar: WAX ROMANO 82264. other id: PVP 9200135. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 561047. Pisum sativum L. FABACEAE Pea

**Donated by:** Rogers NK Seed Company, United States. Received April 03, 1992.

origin: United States. origin institute: Rogers NK Seed Company United States. cultivar: HP758-8-6. other id: PVP 9200136. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 561048. Pisum sativum L. FABACEAE Pea

**Donated by:** Rogers NK Seed Company, United States. Received April 03, 1992.

origin: United States. origin institute: Rogers NK Seed Company United States. cultivar: HP68-4-4-2. other id: PVP 9200137. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 561049. Cynodon dactylon (L.) Pers. POACEAE Bermudagrass

Donated by: Jacklin Seed Company, United States. Received April 03, 1992.

origin: United States. origin institute: Jacklin Seed Company United States. cultivar: SUNDEVIL. other id: PVP 9200138. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 561050. Cynodon dactylon (L.) Pers. POACEAE Bermudagrass

Donated by: Jacklin Seed Company, United States. Received April 03, 1992.

origin: United States. origin institute: Jacklin Seed Company United States. cultivar: TROPICA. other id: PVP 9200139. source: Application abandoned/withdrawn. group: PVPO. Cultivar. Seed.

PI 561051. Phaseolus vulgaris L. FABACEAE Garden bean

Donated by: Ferry-Morse Seed Company, United States. Received April 03, 1992.

origin: United States. origin institute: Ferry-Morse Seed Company United States. cultivar: ENVY. other id: PVP 9200140. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 561052. Lolium perenne L. POACEAE Perennial ryegrass

Donated by: Jonathan Green & Sons, Inc., Cascade International Seed Company, United States. Received April 03, 1992.

origin: United States. origin institute: Jonathan Green & Sons, Inc., Cascade International Seed Company United States. cultivar: GETTYSBURG. other id: PVP 9200141. source: Pending. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 561053. Lactuca sativa L. ASTERACEAE Lettuce

Donated by: Arthur Yates & Company, Pty. Ltd., Australia. Received April 03, 1992.

origin: Australia. origin institute: Arthur Yates & Company, Pty. Ltd. Australia. cultivar: MAGNUM. other id: PVP 9200142. source: Certificate in force. group: PVPO. patent: PVPO. Cultivar. Seed.

PI 561054. Agastache foeniculum (Pursh) Kuntze LAMIACEAE

Donated by: Collicutt, Lynn, Agriculture Canada, Morden Research, Morden, Manitoba, Canada. Received September 24, 1984.

origin: UNCERTAIN. local name: Anise hyssop. other id: Ames 3064. source: NC-7. group: Ames. remarks: Received for bee pasture testing. Perennial. Cultivated. Seed.

PI 561055. Agastache foeniculum (Pursh) Kuntze LAMIACEAE

**Donated by:** University of Washington, Seattle, Washington, United States. Received 1977.

donor id: Seedlot #19. origin: UNCERTAIN. source history: Matthaei received the Agastache from the University of Washington School of Pharmacy, Seattle, WA 98195 in 1977.. local name: Anise hyssop. other id: Ames 3481. source: NC-7. group: Ames. locality: Matthaei Botanical Gardens, The University of Michigan, Ann Arbor, Washtenaw County, Michigan. remarks: Received for bee pasture research. Perennial. Cultivated. Seed.

PI 561056. Agastache foeniculum (Pursh) Kuntze LAMIACEAE Received .

origin: UNCERTAIN. other id: Ames 4546. source: NC-7. group: Ames. Seed.

PI 561057. Agastache foeniculum (Pursh) Kuntze LAMIACEAE

Donated by: Widrlechner, Mark P., USDA-ARS, Plant Introduction Station, Iowa State University, Ames, Iowa 50011, United States. Received September 11, 1985.

origin: United States. local name: Anise hyssop. collector id: Collection #4. other id: Ames 4550. source: NC-7. group: Ames. locality: Growing on the edge of woods on east facing slope at Little Yellowstone County Park. Barnes Co., Kathryn Quad Tl37N R58W, SW1/4 of SW1/4 of Sec. 36, North Dakota. elevation: 396m. remarks: For bee pasture testing. Growing with Solidago and Aster. Perennial. Wild. Seed.

PI 561058. Agastache foeniculum (Pursh) Kuntze LAMIACEAE

Donated by: Pellett, Harold, University of Minnesota, Landscape Arboretum, 3675 Arboretum Drive, Chanhassen, Minnesota 55317, United States. Received November 10, 1986.

origin: United States. cultivar: Anise hyssop. other id: Ames 7569. source: NC-7. group: Ames. locality: 1-1/2 mi East of Backus on the west side of Lindsey Lake, Cass County. remarks: For bee pasture testing. Perennial. Wild. Seed.

PI 561059. Agastache foeniculum (Pursh) Kuntze LAMIACEAE

Donated by: Voigt-Englund, Ms. Judy, Hennepin Co. Park Reserve District, 3800 County Rd. 24, Maple Plain, Minnesota 55359, United States. Received January 30, 1987.

origin: United States. cultivar: Anise hyssop. other id: Ames 7611. source: NC-7. group: Ames. locality: Crow-Hassan Park Reserve, T120N R23W, Hennepin County. remarks: For bee pasture testing. Herbaceous. Perennial. Wild. Seed.

PI 561060. Agastache foeniculum (Pursh) Kuntze LAMIACEAE

Donated by: Collicutt, Lynn, Agriculture Canada, Morden Research Station, Morden, Manitoba, Canada. Received March 10, 1987.

origin: UNCERTAIN. other id: Ames 7765. source: NC-7. group: Ames. locality: Collected just west of Morden, Manitoba. latitude: 49 deg. 20 min.. longitude: 98 deg. 20 min.. Wild. Seed.

PI 561061. Agastache foeniculum (Pursh) Kuntze LAMIACEAE

Donated by: Robertson, John H., Box 250, Raton, New Mexico 87740, United States. Received September 08, 1987.

origin: United States. locality: Growing in moist soil area in openings in Quercus-Robinia woodland. An aspen zone with Helianthella quinquenervis. West terminus of Mesa de Maya between Raton Pass and Trinidad, Schwachheim Canyon, Las Animas Co. Wild. Seed.

PI 561062. Agastache foeniculum (Pursh) Kuntze LAMIACEAE

Donated by: Collicutt, Lynn, Agriculture Canada, Morden Research, Morden, Manitoba, Canada. Received October 20, 1987.

### PI 561062-continued

origin: Canada. other id: Ames 7988. source: NC-7. group: Ames. locality: Spruce Woods Park, Manitoba. Wild. Seed.

PI 561063. Agastache foeniculum (Pursh) Kuntze LAMIACEAE

Donated by: Collicutt, Lynn, Agriculture Canada, Morden Research, Morden, Manitoba, Canada. Received January 15, 1988.

origin: Canada. other id: Ames 8001. source: NC-7. group: Ames. locality: Whiteshell Park, High Lake, Manitoba. Wild. Seed.

PI 561064. Agastache nepetoides (L.) Kuntze LAMIACEAE

Donated by: Barringer, Dorothy, Wildflowers from Nature's Way, RR 1, Woodburn, Iowa 50276, United States. Received November 13, 1985.

origin: United States. other id: Ames 4716. source: NC-7. group: Ames. remarks: For bee pasture testing. Perennial. Wild. Seed.

PI 561065. Monarda fistulosa L. LAMIACEAE

**Donated by:** Widrlechner, Mark P., USDA-ARS, Plant Introduction Station, Iowa State University, Ames, Iowa 50011, United States. Received September 11, 1985.

origin: United States. local name: Bee balm. collector id: Collection #3. other id: Ames 4549. source: NC-7. group: Ames. locality: Growing on ridgetop north of day use area at Ft. Ransom State Park. Ft. Ransom, Quad T135N R58W, Ransom Co., North Dakota. remarks: For bee pasture testing. Growing with Symphoricarpos, Artemisia, and Amorpha canescens. Perennial. Wild. Seed.

PI 561066 to 561067. Monarda fistulosa L. LAMIACEAE

Donated by: Widrlechner, Mark P., USDA-ARS, Plant Introduction Station, Iowa State University, Ames, Iowa 50011, United States. Received September 25, 1985.

### PI 561066 to 561067-continued

PI 561066 origin: United States. local name: Bee Balm. collector id: Sample #8. other id: Ames 4564. source: NC-7. group: Ames. locality: Growing on edge of marsh at The Prairie Center. De Soto Quad, Tl3S R23E, NEl/4 of NEl/4 of Sec. 31, Johnson Co., Kansas. elevation: 293m. remarks: For bee pasture testing. Growing with Ulmus americana, Aster ericoides, and Solanum carolinianum. Little mildew. Perennial. Wild. Seed.

PI 561067 origin: United States. local name: Bee Balm. collector id: Sample #9. other id: Ames 4565. source: NC-7. group: Ames. locality: Growing in brushy road edge in Dorsett Hill Prairie. Everett Quad, T43N R32W, NW1/4 of NW1/4 of Sec. 24, Cass Co., Missouri. elevation: 259m. remarks: For bee pasture testing. Growing with white snakeroot, Commelina, Rubus, and Desmodium. Perennial. Wild. Seed.

PI 561068. Monarda fistulosa L. LAMIACEAE

**Donated by:** Widrlechner, Mark P., USDA-ARS, Plant Introduction Station, Iowa State University, Ames, Iowa 50011, United States. Received September 07, 1986.

origin: United States. local name: Bee balm. other id: Ames 6105. source: NC-7. group: Ames. locality: Growing on ballast on east side of C&NW railroad tracks approximately 300m south of NW 142nd Ave in Polk City. Polk City Quad, T81N R25W Sec. 24 NE1/4 of NE1/4. Polk Co., Iowa. remarks: For bee pasture testing. Single plant selection for vigor and tolerance to powdery mildew. Perennial. Wild. Seed.

PI 561069. Monarda pectinata Nutt. LAMIACEAE

Donated by: Montreal Botanic Garden, Quebec, Canada. Received March 02, 1987.

Monarda fistulosa L. LAMIACEAE
origin: Canada. source history: Seed received from 1987
Delectus seminum et Sporarum.. other id: Ames 7724.
source: NC-7. group: Ames. remarks: For bee pasture
testing. Perennial herb. Perennial. Seed.

PI 561070. Monarda punctata L. LAMIACEAE

Donated by: Beal Garden, Michigan State University, East Lansing, Michigan 48823, United States. Received March 24, 1986.

### PI 561070-continued

donor id: Sample #832. origin: United States. other id:
Ames 5019. source: NC-7. group: Ames. locality:
Sterile sand opening, Barry County. remarks: For bee
pasture testing. Wild. Seed.

PI 561071. Sorghum bicolor (L.) Moench POACEAE Sorghum

Donated by: Miller, F.R., Texas Agr. Exp. Sta., Texas A & M University, College Station, Texas 77843, United States. remarks: RTx436 Sorghum Parental Line. Received April 20, 1992.

> origin: United States. developed: F.R. Miller, T.F. Dusek, K.L. Prihoda, L.W. Rooney. origin institute: Texas Agr. Exp. Sta., Texas A&M University, College Station, Texas 77843 United States. cultivar: RTx436. pedigree: ((SC120-6\*Tx7000)Tx7000)-10-4-6-1-1-1-bk. other id: PL-236. source: Crop Sci. 32(6):1518 1992. group: CSR-SORGHUM. restricted: CSR. remarks: 3-dwarf (dwlDW2dw3dw4) with excellent exsertion. Kernel size medium. Seed color white translucent. Testa non-pigmented. Lemma awnless. Glumes straw colored. Endosperm normal vitreous. Tends to be single culm and more tropically adapted. Resistant to anthracnose and Fusarium. Leaves normally drooping with juicy midrib. Coleoptile color green. Restorer to A. cytoplasmic/qenetic male-sterility and partially restores A2. Spring Annual. Breeding Material. Seed.

PI 561072. Sorghum bicolor (L.) Moench POACEAE Sorghum

Donated by: Miller, F.R., Texas Agr. Exp. Sta., Texas A & M University, College Station, Texas 77843, United States; and Inst. Nac. de Tec. Agro, Argentina. remarks: A/BTxARG-l Sorghum Parental Line. Received April 20, 1992.

origin: United States. developed: F.R. Miller, C. Domanski, L.M. Giorda. origin institute: Texas Agr. Exp. Sta., Texas A & M University, College Station, Texas 77843-2474 United States. cultivar: A/BTxARG-1. pedigree: ((MB807\*BTx624) Bulk F1)-5-5-1-2-bk-bk-1-bk Al cytoplasm with 5 backcrosses. other id: PL-235. source: Crop Sci. 32(6):1517 1992. group: CSR-SORGHUM. restricted: CSR. remarks: 3-dwarf (dwlDW2dw3dw4) with excellent exsertion. Kernel size medium. Seed color white translucent. Testa non-pigmented. Lemma awnless. Glumes straw colored. Inbred parent tan plant color, juicy midrib, non-erect leaves. Caryopses round, no mesocarp and intermediate vitreous waxy endosperm. Maturity medium. Weathering resistance good. Produces hybrids with good food quality. Spring Annual. Breeding Material. Seed.

PI 561073. Sorghum bicolor (L.) Moench POACEAE Sorghum

Donated by: Miller, F.R., Texas Agr. Exp. Sta., Texas A & M University, College Station, Texas 77843, United States; and ICRISAT; and Cen. de Tec Agr. de Salvador. remarks: A/BTx635 Sorghum Parental Line. Received April 20, 1992.

origin: United States. developed: F.R. Miller, R. Clara, V. Guiragossian. origin institute: Texas Agr. Exp. Sta., Texas A & M University, College Station, Texas 77843 United States. cultivar: A/BTx635. pedigree: Al cytoplasm x [ICRISAT population RS/R (C2) S1 102-1-1-2-1-5-1-sel]BC10. other id: PL-234. source: Crop Sci. 32(6):1517 1992. group: CSR-SORGHUM. restricted: CSR. remarks: 2-dwarf (dwlDw2Dw3dw4) with short panicle exsertion. Panicle slightly oval, semi-compact to compact, erect. Glumes semi-tenacious and cover approx. half of the caryopsis. Lemma awnless. Caryopses medium size (28g 1000) and possess a non-pigmented testa. Mesocarp is ZZ and endosperm type normal and intermediate hardness. Maturity slightly later (full season in temperate environments). Good pollen quantity. Plant color tan. Seed color translucent. Midrib juicy. Immune to all current races of head smut (Sporisorium holci-sorghi) and resist. genetically dominant. Spring Annual. Breeding Material. Seed.

PI 561074. Triticum aestivum L., nom. cons. POACEAE Common wheat

Donated by: Souza, E., Idaho Agr. Exp. Sta., University of Idaho, Aberdeen, Idaho 83210, United States; and Agricultural Research Service -- USDA; and Oregon Agr. Exp. Sta.. remarks: Idaho 266 Wheat Germplasm. Received April 20, 1992.

### PI 561074-continued

origin: United States. developed: E. Souza, M. Verhoeven, W.E. Kronstad, D.W. Sunderman. origin institute: Idaho Agr. Exp. Sta., University of Idaho, P.O. Box AA, Aberdeen, Idaho 83210 United States. cultivar: IDAHO 266. pedigree: IDO046/IDO056//Fieldwin. other id: GP-359. group: CSR-WHEAT. restricted: CSR. remarks: Soft white spring variety. Yield high with general adaptation to the Pacific Northwest region of the U.S. Source of high flour extraction and low ash level for utilization by wheat researchers. Moderately susceptible to stripe rust (Puccinia striiformis). Susceptible to Pacific Northwest field races of leaf rust (Puccinia recondita). Unknown reaction of Northwest Hessian fly but expected to be susceptible. Semi-dwarf comparable in height to Treasure and Owens. Milling quality superior to Owens and Penawawa in 3 yrs. of Western Reg. Nursery testing. Spring Annual. Breeding Material. Seed.

PI 561075. Triticum polonicum L. POACEAE

Donated by: Quinn, T.M., United States. Received 1989.

origin: United States. developed: T.M. Quinn. cultivar: QK-77. other id: PVP 8900108. source: Certificate in force. group: PVPO. patent: PVPO. received as: Triticum turgidum var. polonicum. Cultivar. Seed.

# Scientific Name Cross Reference

Abelmoschus sp. Acer monspessulanum 560321	560926 560320-	Arachis hypogaea subsp. fastigiata 560932	560927-
Acer tataricum	560322	Arachis hypogaea	
Aegilops biuncialis	560730	subsp. hypogaea	560933
Aegilops columnaris	560506-	Arbutus andrachne	559463
560507		Arbutus arizonica	559464
Aegilops cylindrica 560522,560733-560740	560508-	Arbutus menziesii 559470	559465-
Aegilops geniculata	560741		559471
Aegilops hybrid	560742	Artocarpus altilis	560974
Aegilops markgrafii var. markgrafii	560731-	Artocarpus odoratissimus 560975-560978	
560732	EC0E22-	Avena fatua	560776
Aegilops neglecta	560523-	Avena sativa 559368,	
560526,560743-560746		Avena sterilis	
Aegilops speltoides	560527-	Averrhoa carambola 560983	560979-
var. ligustica 560528	360327-	Benincasa hispida	E60000
Aegilops speltoides		Beta vulgaris 560130-	
var. speltoides	560529-	560336-560342	300130,
560531,560747-560752	300323	Cajanus cajan	560939
Aegilops tauschii	560532-	Calendula suffruticosa	560148
560538,560753-560756	300332	Canarium decumanum	560984
Aegilops triuncialis	560539-	Capsicum annuum	559987
560554,560757-560770	300333	Capsicum chacoense	560944
Aegilops umbellulata	560555-	Capsicum frutescens	559988-
560557,560771-560775		559991	
Agastache foeniculum 561063	561054-	Capsicum sp. 560897, 560936,560940-560943	560934-
Agastache nepetoides	561064	Carthamus tinctorius	559909,
Amblyopyrum muticum	560121-	560161-560205	
560127		Catharanthus roseus	560302-
Amelanchier alnifolia	559401-	560306	
559428		Ceanothus impressus	559876
Amelanchier alnifolia		Ceanothus integerrimus	559877-
var. alnifolia	559429	559878	
Amelanchier alnifolia		Ceanothus velutinus	559879-
var. cusickii	559430	559880	_
Amelanchier arborea	559431-	Chrysanthemum coronarium	1
559432 Amelanchier asiatica	559433-	560149 Cicer arietinum 559359-	.EE0262
559435	559455	Citrullus lanatus	559992-
Amelanchier canadensis	559436-	560026,561041	333332
559439	333430	Citrullus lanatus var. 1	anatus
Amelanchier laevis	559440-	560901	anacas
559441	333110	Citrus reticulata	560985
Amelanchier lamarckii	559442-	Coffea sp.	560986
559445		Corchorus olitorius	560027-
Amelanchier ovalis	559446	560049	
Amelanchier sp. 559447		Cucurbita ficifolia	560937
Amelanchier utahensis		Cucurbita maxima	
559462		subsp. andreana	560953
Apium graveolens	560330	Cucurbita moschata	560949
Arachis hypogaea	559923	Cucurbita pepo	559387
mracmrs mypogaea	003320	coccinion pop	

Cucurbita sp. 560938,560945-	Malva nicaeensis 560155
560948,560950-560952	Mangifera applanata 560995
Cuphea carthagenensis 560080	Mangifera casturi 560996
Cuphea denticulata 560073	Mangifera decandra 560997
Cuphea lanceolata 560083	Mangifera foetida 560998-
Cuphea tolucana 560076-560079	560999
Cuphea viscosissima 560084-	Mangifera indica 561000-561005
560114	Mangifera odorata 561006-
Cydonia oblonga 559881-559906	561008
Cynodon dactylon 561049-561050	Mangifera pajang 561009
Dactylis glomerata 561039	Mangifera pentandra 561010
Durio grandiflorus 560987	Mangifera quadrifida 561011
Durio oxleyanus 560988	Mangifera similis 561013-
	561014
Eragrostis lehmanniana 559907	Mangifera sp. 561012
Euonymus hamiltonianus 560150	Medicago sativa 560309,560332
Festuca arundinacea 559374,	Medicago sativa subsp. falcata
561043-561044	560333
Garcinia hombroniana 560990-	Momordica charantia 560902
560991	Monarda fistulosa 561065-
Garcinia mangostana 560992	561069
Glycine max 559364-559366,	Monarda punctata 561070
559369-559371,559379,559397-	Nephelium cuspidatum
559400,559924,559927,559931-	var. robustum 561022
559934,560206-560207,560300,	Nephelium lappaceum
560307,560909-560911	var. lappaceum 561015-
Gossypium barbadense 560140	561018
Coccupium birantum 550206	
Gossypium hirsutum 559396,	Nephelium lappaceum
559910	var. pallens 561019-561021
Gypsophila muralis 560152	Nephelium ramboutan-ake 561023
Gypsophila paniculata 560151	Nicotiana tabacum 559388
Helianthus annuus 559476-	Nierembergia hippomanica
559481,560141-560147	var. coerulea 560301
Hordeum vulgare	Oryza sativa 559472,560208-
subsp. spontaneum 559556,	560299,561036
560558-560560	Oryza sp. 559915
	1 4 4
Hordeum vulgare subsp. vulgare	Panicum coloratum 559908
559484,559492-559521,559648-	Phaseolus vulgaris 559389-
559652,560053,560137,560139,	559391,559394,559926,560050-
560308,560331,560561-560564,	560052,560310-560315,561042,
560778-560781,560912-560925	561045-561046,561051
Ilex hybrid 560963-560966	Phlox drummondii 559955
Ilex serrata 560967	Pisum fulvum 560061-560067 Pisum sativum 559395,559956-
Ipomoea carnea ssp. fistulosa	Disum sativum 550305 550056-
560955	559961,561047-561048
Ipomoea sp. 560954	Pisum sativum subsp. elatius
Lactuca sativa 559393,561053	560055-560056,560058-560060,
Lansium domesticum 560993 Lavatera trimestris 560153-	560969
Lavatera trimestris 560153-	Pisum sativum var. arvense
560154	560968
Lens culinaris 560159	Pisum sativum var. pumilio
Linum usitatissimum 559367	560057,560068-560072
Litsea garciae 560994	Pisum sp. 560970-560973
Lolium multiflorum 559392	Pleiospermium latialatum
Linum usitatissimum 559367 Litsea garciae 560994 Lolium multiflorum 559392 Lolium perenne 561052	561024
Tycopersicon occulor-um EE0227	
Lycopersicon esculentum 559377,	Poa pratensis 561037-561038,
559911-559914,560323-560329	561040

Poa supina Psidium guajava	559922 561025
Robinia viscosa var. har 560156	twigii
Rosa sp. Saccharum hybrid Sauropus androgynus	560319 560160
Sauropus androgynus Secale cereale subsp. ce	561026
559978-559986,560565-	560581,
Sicana odorifera	560956
Sicana odorifera Solanum mammosum Solanum melongena 560906	560957
Solanum tabanoense Sorbaria sorbifolia	560054
Sorbaria sorbifolia Sorghum bicolor 559482-	560157
559723-559875.560343-	560501.
561071-561073 Spiraea hybrid Syzygium aqueum Tagetes patula 559385-	560158
Syzygium aqueum Tagetes patula 559385-	561027 559386
Tephrosia vogelii	560958
Tephrosia vogelii Trifolium pratense 559491,559722,559925,	559485-
559491,559/22,559925, Trifolium sp.	560138
Triticum aestivum	559376,
00007070000007	559557-
559629,559646-559647,	559653-
559720,559928-559930, 559968.560115-560120.	560128-
559968,560115-560120, 560129,560318,560334,	560582-
560696,560787-560863,	561028-
561035,561074 Triticum boeoticum	560864-
560870	300004
Triticum boeoticum	
subsp. boeoticum	560871
Triticum dicoccoides 560872-560877	560697,
Triticum durum 559630-	559645,
559969-559975,560698-	560718,
560878-560895 Triticum monococcum 560729	560719-
	561075
	559976,
560335	559977,
Viburnum lentago	560908
VICIA CIACCA	ככסטסכ
Vicia villosa	560502 560503 560504
Vigna radiata	560504
Vigna unguiculata	560505,
560959-560960,560962	

Vigna unguiculata subsp. sesquipedalis 560907, 560961 X Triticosecale sp. 559372-559373 Zea mays subsp. mays 559375, 559380-559384,559473-559475, 559916-559921,559935-559954, 560074-560075,560081-560082, 560316-560317

# Common Name Cross Reference

Alfalfa 560309,	560332	Lentil	560159
Amblyopyrum 560121-	·560127	Lettuce	559393,561053
American pima cotton	560140	Madrone	559463-559471
Animated oat	560777	Mandarin	560985
Annual Ryegrass	559392	Mangosteen	560992
Annual phlox	559955	Madrone Mandarin Mangosteen Marigold	559385-559386
Animated oat Annual Ryegrass Annual phlox Bachang 560998-	560999	Navy hean	559389
Barb goatgrass 560539-	560554	Navy bean Nierembergia	560301
Barley 559484,559492-		Orchardgrass	561039
559648-559652,560053,		Oriental wheat	
560139,560308,560331,		Pea 559956-	-559961,56104/-
560564,560778-560781,	560912-	561048	
560925		Peanut	559923
Bermudagrass 561049-	-561050	Pepper	560897
Bitter melon	560902	Perennial ryegras	ss 561052
Bluegrass	559922	Pumpkin Quince Rambutan	559387
Breadfruit	560974	Quince	559881-559906
Carambola 560982-	-560983	Rambutan	561019.561021
Bitter melon Bluegrass Breadfruit Carambola 560982- Celery Chickpea 559359-	560330	Red clover	559485-559491,
Chickpea 559359-	-559363	559925,560138	,
Club wheat 561028-	561035		,559915,560208-
Common oat 559368,	559721	560299,561036	,003310,000200
Common wheat 559522-	559555,	Rye 560565-	-560591 560792-
EEGEE7_EEGE20 EEGE46		560786	300301,300702
559557-559629,559646-	559647,		E(0)() E(0)0E
559653-559720,559928-	559930,	Safflower 559909,	,560161-560205
559962-559968,560115-	560120,	Snadbush	559401-559462
560128-560129,560318,	560334,	Shadbush Snap bean Snap peas	559394
560582-560696,560787-	-560863,	Snap peas	559395
561074		Sorghum 559723-	
Corn 559375,559380-	-559384,	560501,561071-	
559473-559475,559916-		Soybean 559364-	
560074-560075,560081-	-560082	559371 <b>,</b> 559379,	,559397-559400,
Cotton	559396	559924,559927,	,559931-559934,
Cotton Dry bean 559926, Durum wheat 559630-	561042	560206-560207	,560300,560307,
Durum wheat 559630-	-559645,	560909-560911	
559969-559975,560335,	560698-	Star fruit	560979-560981
560718,560878-560895		Sugar beet	560135-560136
Eggplant 560903-		Sugarbeet 560130-	
	-559954,	560342	
560316-560317	003301,	Sugarcane	560160
Flax	559367	Sunflower	559476-559481
	559391,	Sweet pepper	559987
560310-560315,561045-		Tall fescue	559374,561043-
561051	301040,		559574,561045-
	ECOEE7	561044	EE0200
Goatgrass 560555-	1	Tobacco	559388
Grain sorghum 559482-	1		,559911-559914,
Guava	561025	560323-560329	550070 550070
Japanese winterberry	560967	Triticale	559372-559373
Jointed goatgrass	560508-	Upland cotton	559910
560522		Vinca	560302-560306
Kentucky bluegrass	561037-	Watermelon	560901,561041
561038,561040	i	Waxgourd	560900
Kleingrass	559908	Wheat	559376,559378
Kwini 561006-	i	Wild einkorn	560864-560870
Lehmann lovegrass	559907	Wild emmer	560697,560872-

560877		
Wild oat		560776
Wildpea		560055-560060
Yard long	bean	560907
giant ramb	outan	561022
pulasan		561023
rambutan	561015-	561018,561020

#### Acronyms

For space conservation and consistency in identifying locations, the following acronyms have been used in Plant Inventory 201:

- CIANO Centro de Investigaciones Agricolas del Noroeste (Mexico)
- CIP Centro Internacional de la Papa (Peru)
- CSIRO Commonwealth Scientific and Industrial Research
  Organization (Australia)
- EMBRAPA- Empresa Brasileira de Pesquisas Agropecuarias (Brazil)
- FAO Food and Agriculture Organization of the United Nations
- ICARDA International Center for Agricultural Research
   in the Dry Areas (Syria)
- ICRISAT International Crops Research Institute for the Semi-Arid Tropics
- IITA International Institute of Tropical Agriculture
- INIFAP Instituto Nacional de Investigaciones Forestales y Agropecuarias (Mexico)
- NBPGR National Bureau of Plant Genetics Resources (India)
- PGQO Plant Germplasm Quarantine Office (USA)
- SADCC Southern African Development Coordination Conference (Zimbabwe)
- USDA-ARS U.S. Department of Agriculture, Agricultural Research Service (USA)
- USDA-SCS U.S. Department of Agriculture, Soil Conservation Service (USA)
- VIR N.I. Vavilov Institute of Plant Industry (USSR)